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OPERATION OF SCHOOL LUNCH PROJECTS

CIRCULAR OUTLINING THE TECHNIQUES FOR
CONDUCTING THE SCHOOL LUNCH PROGRAM

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W. P. A. Technical Series
Welfare Circular No. 1

October 9, 1940

FEDERAL WORKS AGENCY
WORK PROJECTS ADMINISTRATION
Division of Professional and Service Projects
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FOREWORD

This circular provides a suggested operating technique for School Lunch Projects. The procedure presented herein is not mandatory. Local conditions and special requirements may necessitate some changes. It is believed, however, that this procedure is adequate to accomplish the desired objective of such projects.

This procedure relates only to the technique of project operation. Nothing in this circular is to be construed as affecting or modifying in any way administrative procedures of the Work Projects Administration.

Howard Hunter

Howard Hunter
Acting Commissioner of Work Projects

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INTRODUCTION

> In our educational system we are wasting much money trying to teach children with half starved bodies and minds. We shall spend tomorrow on the care of their sickness many times over what we save today on food which would prevent it.*
>
> Thomas Parran, Jr., Surgeon-General
> United States Public Health Service

A school lunch program developed in response to the urge for the establishment of government work projects for women and in response to the demand from local school officials and other interested persons that hungry children be fed. This demand came not only from metropolitan and urban areas but from rural and remote communities, where contrary to general belief, malnutrition has long been a serious problem.

School lunch projects were initiated during the early days of the relief program, financed from funds allocated under the Reconstruction Finance Corporation. Under the Civil Works Administration the program was greatly expanded and by the end of the Federal Emergency Relief Administration in 1935, school lunch projects were in operation in 39 States, employing 7,442 women.

The philosophy underlying this early program was simple; Children were hungry; they must be fed. But as the program expanded and it became apparent that satisfying the appetites of hungry children was not an end in itself, new methods and new techniques of project operation were introduced. The problems involved were complex and confused; such issues as how to feed needy children without social stigma and how to

Source: "Nutrition and National Health" - The Technology Review, Vol. XLII, No. 8, June 1940.

reach children suffering from malnutrition though from families able to pay for lunches had to be recognized and solved; such problems as how to train project workers in habits of cleanliness and sanitation and in the preparation and serving of food, with an ever-increasing change in personnel due to legislative action, had to be recognized and solved; such problems as how to secure the maximum community cooperation had to be recognized and solved.

The objectives of the program became then, in order of importance, to:

1. Establish useful work projects for the employment of needy persons.
2. Feed needy and malnourished children, without discrimination, well-balanced meals.
3. Secure community cooperation to expand the program at a rate necessary to meet the needs of all children in rural, urban, and metropolitan areas.

As of April 24, 1940, 36,203 persons were employed on the school lunch program with projects operating in all but two States. Of the number employed, 7,864 were men and 28,339 were women. The men were employed primarily on the gardening aspect of the project, which has now become, along with food preservation, an integral part of the program (It should be noted that many communities request projects which cannot be operated because there is no available WPA labor.)

The correlation of gardening and canning activities with the serving of school lunches has been an obvious solution of the problem of supplying children with adequate vegetables in their diet and at the same time providing year-round employment for the persons on the project. The Surplus Marketing Administration through the allocation of surplus foods has made possible the operation of school lunch projects in many communities which would otherwise not be able to maintain a program.

It is to be noted in the expansion of the program that the philosophy has greatly changed. A large number of agencies and organizations, Federal, state, and local, are now cooperating in the program; the lunches have become not merely "hot" lunches, which in many instances meant only a bowl of soup and a piece of bread served at noon, but school lunches which are well-balanced, well-cooked, and well-served meals. As the program grows it is reaching more and more high school students as well as younger children.

In many places the serving of breakfast to children who came to school hungry because of the inadequacy of their home meals or because of the long distances they must travel to reach school has become a part of the program. Cod liver oil, and supplementary mid-morning nourishment in the form of milk or fruit are often being provided for extremely malnourished children.

The most persistent trend appearing at the present time is that which includes the serving of school lunches as a regular part of the educational services to children. More and more the public is recognizing that the school is responsible for those factors which affect the physical well being of the child as well as for those which affect his mental development directly. WPA school lunch projects are expanding to include summer feeding programs for children in playgrounds and in camps for underprivileged and malnourished children.

The methods and techniques elaborated in this manual have been developed in an effort to meet the many perplexing problems in the operation of a school lunch program and to establish standards of operation which will increase the value of the projects to the communities which they serve.

OPERATION OF SCHOOL LUNCH PROJECTS

Part I Preliminary Planning for a School Lunch Project

In planning for the operation of a WPA school lunch project it is necessary to consider the types of activities permissible under WPA regulations, the extent of the need not met by existing school feeding programs in the community, the potential legal sponsorship, the interest of the community in promoting the work, and the ability of local organizations to provide financial assistance.

Section 1. Conditions of Operation. WPA personnel may be assigned to projects for preparing and serving meals to needy or undernourished children in public and parochial schools, public camps, public playgrounds, and child care centers, and to other WPA projects where the serving of food is a regular activity of the project, subject to the provisions set forth in Operating Procedure G-5, section 13.

If a project is to operate in schools where both free and paid lunches will be served, as in school cafeterias where WPA labor is provided to make possible the serving of free lunches, special consideration should be given to the provision which states, "There shall be no discrimination or segregation of children who are receiving free lunches from other children." The preliminary planning with the sponsor should include specific arrangements to insure that this requirement is met. Practices such as the following are considered discriminatory:

1. Serving a different menu to children receiving free lunches;
2. Using special tickets which would obviously identify children as recipients of free lunches;

3. Serving free lunches in a separate room or at separate tables;

4. Requiring children receiving free lunches to stand in a separate line when cafeteria service is used;

5. Serving free and paid lunches at different hours.

It is recommended that all transactions with respect to payment for lunches be handled in the school office or other room designated for that purpose rather than in the lunch room or in the individual class rooms. A ticket system, providing for the use of identical tickets for both paid and free lunches has proved generally satisfactory. It is the sponsor's responsibility to assign a representative, usually a school secretary or teacher, to collect money and issue tickets, since WPA personnel is not permitted to handle funds.

When the established system requires daily cash payment in the lunch room and it is not feasible to adopt a ticket system, tokens resembling coins may be issued to children receiving free lunches.

When WPA assistance is requested to enable a school operating its own lunch room to provide free lunches for an additional number of children, assurance should be given that the standards of operation will be equal to those set for school lunch projects operated entirely with WPA labor. It is not to the best interests of the WPA program to have a part in the operation of a lunch room which is substandard with respect to cleanliness and sanitation or in which the kind of food served indicates no regard to the nutritional needs of children. Under no conditions should WPA labor be provided for school lunch rooms which do not meet the standards of WPA operated school lunch units.

Section 2. Sponsorship. School lunch projects, either statewide or local may be sponsored by the Department of Education, Department of Public Welfare, Department of Health, or other public agency legally authorized to prosecute such work according to regulations set forth in Operating Procedure G-2. In most instances, however, the official sponsor needs and requires assistance from co-sponsors in the promotion and development of the school lunch program.

Since Federal funds are usually limited to payment for supervision and labor, local school boards ordinarily assume the financial responsibility for food, other material costs, and equipment for the units of the project operating under their jurisdiction. Frequently funds are provided as sponsors' contributions through the cooperation of non-profit private agencies such as Parent Teacher Associations, civic organizations, welfare agencies, and interested individuals.

Section 3. Advisory Committees. Community participation and assistance, which is heartily encouraged, may be secured through the establishment and use of advisory committees comprised of representative citizens. The selection of persons for a community committee calls for considerable groundwork which can be done by the WPA supervisor and the sponsor. Committee appointments should be made on the basis of indicated interest, capacity for leadership, influence, and willingness to serve on the part of the person considered.

The committee should meet at regular intervals in order to carry out the work effectively. A working, interested committee signifies that people of the community are taking an active part in solving their community's problem. In order to render the maximum service, a WPA school lunch program must be a community program properly integrated into the community life. To this end, it is suggested that personnel for school lunch project advisory committees be selected from the following:

Local school boards
Departments of Public Welfare
Departments of Public Health
Parent Teacher Associations
Home Economics Associations
Agricultural Extension Services
Service clubs and fraternity organizations
Women's clubs
Church societies
Chambers of Commerce

The major responsibilities of an advisory committee should be to assist in the planning for a school lunch program, which may also include gardening and food preservation activities, and to interpret the entire program and its achievements to the community so that its aims are understood. In securing financial support for this program, an advisory committee should assume responsibility for soliciting contributions from civic organizations, business firms, and individuals. The technical assistance of an advisory committee should be used, when it is available from members of the committee who are professional persons, such as home economic teachers, agricultural agents, home demonstration agents, and health officials. The advisory committees should coordinate their work with that of the Parent Teacher Association and other groups reaching the homes in order that the educational phase of the school lunch program may carry over into the homes of the children. This would be instrumental in introducing better dietary standards in the community.

Section 4. Integration with Other Programs. In the planning and development of a WPA school lunch program, recognition should be given to the work of other agencies and organizations in the field of child welfare, and an endeavor made to integrate this program with those having similar objectives. Through the cooperation of the school lunch project with other programs the scope of activity may be enlarged to include the feeding of needy children in schools during vacation, on summer play grounds, and in recreation camps.

Particular attention should be given to the program for developing increased outlets for surplus food stuffs which is directed by the Surplus Marketing Administration and which includes the expansion of the school lunch program and the development of a year-round feeding plan.

In the expansion of WPA school lunch projects, close coordination between the local distributing agencies for surplus foods and the sponsors of the school lunch program is necessary. Regulations governing the allocation of surplus foods, the amounts distributed to sponsors, and the method of distribution are determined by the Surplus Marketing Administration and the State Department of Welfare. The mechanics of distributing surplus foods are generally handled by WPA commodity distribution projects.

Part II, Project Personnel

Section 5. Supervisors. The organization of a statewide project may provide for state, district, area, county, and unit supervision according to the extent and size of the program.

Supervisory personnel must be selected in accordance with requirements set forth in Operating Procedure E-9, Section 44. General duties performed by all supervisors should be in accord with those given in job descriptions in Operating Procedure E-9, Appendix B, Section 5. Specific duties should be planned administratively by the State Director of Professional and Service Projects.

Since the success or value of a project will depend largely upon the ability of the supervisor as a leader, the following general qualifications should be looked for in all supervisors regardless of level:

1. Executive and administrative ability with an understanding of and appreciation for the program;

2. Ability to direct others as well as to follow directions;

3. Enthusiasm, initiative, and good judgment;

4. A pleasing personality and ability to establish and maintain harmonious working relationships with others;

5. Ability to meet emergencies with poise and self-confidence.

Section 6. Project Workers. Workers should be assigned to school lunch projects as foremen, cooks, or helpers, according to the regulations set forth in Operating Procedure E-9. Assignments should be made according to the organization plan and the type of work to be performed. Every unit not large enough for the assignment of a full time supervisor should have one person in immediate charge to assume direction of and responsibility for the work of the unit. It may be advisable in many instances to assign men to the school lunch project as cooks and helpers. Large units may require the employment of workers in other classifications such as bakers, clerks, and typists.

Food preparation facilities, the type of meal to be prepared, and general working conditions must be taken into consideration in determining the ratio of workers to children served on a particular unit. On projects serving up to 100 children a ratio of 1 to 25 is ordinarily advisable. As the size of the unit increases the proportionate number of workers required will decrease. One worker to every 50 children beyond 100 is usually a satisfactory ratio.

Part III Health and Hygiene

Section 7. Medical Examinations. Arrangements for medical examinations of workers must be made in accordance with Operating Procedure G-5, Section 13.

Sponsors should not overlook the importance of requiring all persons who assist in the preparation and serving of lunches to have health certificates. Children, teachers, or other volunteer workers should meet the same health standard required of workers assigned to the project.

Section 8. Personal Hygiene. Workers who have colds should not be on duty in a school lunch unit.

The use of paper tissues in place of handkerchiefs is desirable. These should be provided by the sponsor, if possible.

Absolute cleanliness of person and clothing is essential for all food handlers and should be required of school lunch workers. Good grooming should also be required. A well groomed appearance increases the workers' self confidence, helps them develop a professional attitude toward their work, and presents them favorably to the public.

The hair, which should be kept clean and neatly arranged, must be covered at all times by a close fitting cap or by a net. Nets that as nearly as possible match the color of the hair are preferable.

A standard first aid kit shall be maintained on each school lunch project unit, and all injuries sustained by workers in the line of duty shall be reported in accordance with prescribed procedure.

Section 9. Uniforms. In accordance with Operating Procedure G-5, section 13, workers on the school lunch projects are required to have three uniforms. However, since the nature of the work necessitates a fresh uniform every day, five uniforms are preferable to allow adequate time for laundering.

White uniforms for men should be required and should consist of trousers, jumper, cook's cap, and butcher's apron. The material for men's uniforms should have sufficient body to be absorbent and sturdy. Heavy sheeting, duck, or drill are more suitable for men's uniforms than lighter weight materials.

The uniforms for women should consist of a dress and work apron; a cap may be included if preferred to a hair net. The dress should be a closed model, not "wrap around," made comfortably loose through the shoulders and arms to permit free body action. Sleeves may be short or long according to state recommendations. If buttons are used as fasteners both buttons and buttonholes must be kept intact. The use of pins for fasteners should not be permitted. A satisfactory uniform for women workers has been developed by the Colorado statewide sewing project. A sketch of the uniform and a diagram of the lay together with directions for construction appear in Appendix A.

The work apron should be made with a bib sufficiently wide to protect the front of the uniform and should be full enough to protect the sides of the dress. The cap should cover the hair completely.

The laundering of uniforms should also be a part of the sponsor's contribution but may be made the responsibility of the worker. The use of white uniforms is suggested since they may be easily laundered. Colored

uniforms often fade from continual laundering and are unattractive in appearance.

Supervisors of school lunch units should be required to wear uniforms when assisting workers and when inspecting the preparation of food. Field supervisors and visitors should be provided with slip-on uniforms if observations are made in actual contact with food. The material and style selected for uniforms to be worn by supervisors should conform to the accepted standards for workers uniforms but they may be distinctive in color although practical and conservative.

(October 9, 1940)

Part IV Physical Set-Up of a School Lunch Unit

The space and equipment provided for a school lunch unit should be such that food may be prepared and served in an orderly and efficient manner under safe and sanitary conditions. Certain minimum standards are necessary in order to attain this objective. Eagerness to serve the need in a community should not prevent adherence to these standards; the minimum should be met by the sponsor before a unit is opened. Gradually, as the value of the project becomes evident to the community, more desirable standards can be achieved.

Section 10. Types of School Lunch Units. The availability of space, and facilities in the community will determine whether school lunch units will be located in the schools they are to serve or elsewhere. A survey of the local situation will indicate the type of operation which will be most effective.

A. Complete Unit at School Site. When school buildings include already established kitchens and lunch rooms or when space which may be equipped for preparing and serving meals is available it is usually desirable to operate the school lunch unit in the school itself. If space in the school building is not available, a separat building on the school grounds may be used. In many instances schools have found it possible to build kitchens and lunch rooms of inexpensive construction on the school premises, as separate buildings or additions in order to provide for the operation of a school lunch unit.

B. Complete Unit in Community Building. If facilities for cooking and serving lunches cannot be provided at the school site, school lunch quarters may be established in some other building in the community, preferably within easy walking distance of the school. The sponsor should provide for supervision of children between the school and lunch room and for transportation, if it is not feasible for the children to walk.

An already established, well-equipped kitchen and dining room in a church, club house, or community center may prove satisfactory and is desirable from the standpoint of minimizing equipment expense. If this type of housing is used arrangements should be made to insure that other activities carried on in the building will not interfere with school lunch operations.

C. Central Preparation Unit. In certain situations it may be advisable to establish a central preparation unit to serve all the schools in a city or town or a number of rural schools within an accessible radius. Under this type of operation food is prepared in the central kitchen in sufficient quantities to supply the total number of lunches to be served and distributed in bulk to the individual schools.

The plan makes it possible to extend the school lunch program to schools which lack the necessary space and facilities for food preparation. It also offers a possible solution to the problem of providing school lunches in rural schools in localities where no certified workers are available.

When the schools served are located within a short distance of the central kitchen, workers who assist in the preparation of the lunches may go to the schools at the lunch hour to serve the food, wash and sterilize the dishes. When this is not possible, helpers may be assigned for full time at the serving site, provided the number of lunches served is sufficient to make the plan feasible from the standpoint of hours of work. In order to provide full time employment it may be desirable to have the workers at the school prepare a portion of the lunch. This preparation would necessarily be limited to foods requiring no cooking, such as salads, sandwiches, and uncooked deserts.

If WPA labor is not available or if the number of lunches served does not justify the assignment of a worker, the sponsor should assume responsibility for the serving of the food. In such cases all WPA standards will apply.

Transportation of the food to the schools is an important factor in the central kitchen type of school lunch operation. In accordance with Operating Procedure G-5, section 13, all applicable state and local health and safety regulations shall be observed. Provision must be made for a transportation system which will insure deliveries to the various serving locations at the proper time. Covered containers, sterilized daily before they are filled, will be necessary to protect the food in transit. Two sets will usually be required for each school so that the truck making deliveries may pick up those used the previous day and bring them back to the preparation center. Insulated containers for hot foods should be provided, if possible; otherwise provision should be made for reheating food at the serving site.

D. Central Baking Unit. In many instances full use cannot be made of the large quantities of flour, cornmeal, oatmeal, and

other cereal products supplied by the Surplus Marketing Administration because school lunch units are not equipped with adequate oven space for baking all the breadstuffs required for the lunches or because sufficient labor is not available. For more efficient operation under those circumstances, a central baking unit is recommended to supply bread, rolls, muffins, and occasionally cakes and cookies, to a number of schools within a given area. Adequate equipment, well qualified personnel, and a workable plan for distribution are essential to the successful operation of a central baking unit.

When individual school lunch units are equipped for baking but are inadequately staffed for this activity, an itinerant baker might be used, particularly in a metropolitan area, to bake breads, cookies, etc., in the different locations on certain days each week. By careful scheduling of time, one baker might serve from two to six schools, depending on the quantities of baked goods required and distances to be traveled.

Section 11. Building Requirements. It is the sponsor's responsibility to see that the space provided for a school lunch unit meets all safety and sanitary regulations in force in the community. Frequently, a little thoughtful planning with the sponsor will make it possible to improve existing conditions which do not already meet requirements, without great expenditures of time or money.

Before a unit is opened, the location and all equipment shall be inspected and approved by the WPA safety representative in accordance with prescribed regulations.

A permanent building with inside finishes which are attractive and easy to clean is desirable. A rough temporary building, unfinished inside, may be accepted where the climate permits. Such a building should be whitewashed inside as a minimum standard.

A. Walls and Ceiling. A smooth, non-absorbent, washable finish which is easily cleaned is desirable. A soft, light color which reflects light without glare is preferred.

A clean whitewashed wall with oilcloth above the sink will be acceptable as a minimum.

B. Woodwork. A smooth washable finish, harmonizing in color with the walls, is preferred. The minimum requirement is unfinished woodwork sufficiently smooth to be kept clean.

C. Floors. Floors should be resilient so that they will not be tiring to stand on, smooth, non-absorbent, easy to keep clean, durable, and attractive in appearance. Inlaid linoleum over a felt base is a very satisfactory material.

A minimum standard requires a floor which is reasonably smooth and possible to keep clean. With cement floors rubber mats or wooden platforms should be provided at tables, sinks, and other work centers for the comfort of the workers.

D. Light. Lighting which will enable workers to do all their required tasks without eyestrain is essential. Natural light

is desirable but even a room with good natural light will require supplementary artificial lighting for dark days, particularly over the food preparation and cooking areas. Electric lights of the semi-indirect type placed to give even light in all parts of the room are preferred. If this standard cannot be met the best available type of lighting which will meet safety requirements should be used.

Windows should be equipped with shades to prevent glare. If the sponsor is unable to purchase them, roll shades may be made out of wrapping paper, or unbleached muslin draw curtains, two to the top sash and two to the lower sash, may be used.

E. Heat. A heating system should be provided which will maintain a comfortable temperature during the entire day, so that it will not be necessary for workers to wear sweaters, coats, rubbers, or overshoes in the kitchen or for the children to wear their wraps while eating lunch.

Thermostat controlled furnace heat is desirable. A wood or coal range, to be used for both cooking and heating, is a minimum.

F. Ventilation. Space provided for school lunch units should be well ventilated. It is desirable to have windows on two or more sides of the room to provide cross ventilation. Windows should open from both top and bottom. If window space is not sufficient for good ventilation electric fans are recommended to increase the circulation of air.

School lunch units should not be located in rooms which have no opening to the outside, except in buildings equipped with adequate ventilating systems.

Section 12. Space Requirements. The amount of space required for a school lunch unit will necessarily depend on the number of lunches to be prepared and the equipment to be used. It must be adequate to provide sufficient areas of work for all the activities of the unit: receiving and storing supplies; preparing and cooking food; serving the meal; washing dishes. Space where workers may hang their street clothes and change into their uniforms is another essential. Toilet and lavatory facilities for the workers must also be provided.

A. Storage Area. Safe and convenient storage space should be provided for all equipment and supplies. To receive supplies as they are delivered to the unit there should be a table or box as near to the storage area as possible.

The preferred type of storage space for food supplies is a separate room convenient to the kitchen. It should be dry, well ventilated, adequately lighted, and kept at cool but not freezing temperature. It should have shelves, bins, and racks, raised several inches from the floor, to provide for proper storage of all items. The door should have a lock. Refrigeration for butter and other perishables received in considerable quantities is highly desirable.

A minimum standard for storage space would require adequate shelves, bins, and racks in the kitchen or other available place conveniently located. Such storage space should be enclosed and equipped with locks.

Storage closets for cooking utensils and supplies used daily should preferably be located in the kitchen.

B. Food Preparation, Cooking, and Clean-Up Area. A separate kitchen which can be arranged with convenient areas for food preparation, cooking, and dish washing is desirable.

Part of a room providing adequate space for the satisfactory performance of this work is the minimum requirement.

The foods laboratory of a school sometimes serves as a school lunch kitchen, but such an arrangement should not be permitted when the laboratory is used for classes at the time the lunch is being prepared.

C. Serving Area. A separate room, convenient to the kitchen, is desirable for serving the school lunch. If it is necessary to serve the lunch in the same room in which food is prepared, the space farthest from stove and sink should be used for the purpose. Sufficient space to provide for seating the children at tables is required. Meals may be served in class rooms at the children's desks or study tables when no other space is available.

D. Dressing Room. The ideal dressing room for workers is a separate room with adjoining lavatory and toilet. The room should be equipped with clothes rod or hooks and hangers, a shelf or rack for hats, a rack for shoes, a dressing table, and mirror.

As a minimum, a section of a room other than one in which food is handled should be set aside for the use of the workers. The space should be screened or curtained for privacy, and hooks or rack provided for hanging street clothes. If it is impossible to provide a separate toilet for the workers, they must have access to one which is kept in a sanitary condition. In a building without lavatory facilities, a wash basin should be arranged on a table or box away from the food preparation and serving areas. Paper towels are required as on other WPA projects.

Section 13. Sanitation. WPA school lunch units are food handling establishments; therefore they should conform to state and local regulations for such establishments. As stated in Operating Procedure G-5, Section 3: "Where it is not possible in small rural schools to meet such regulations, the cooperation of the State Health Department should be sought in establishing standards which would permit the operation of school lunch project units under adequate conditions of safety and sanitation."

A. Water. A safe water supply is an essential for every school lunch project. If the water comes from a community supply which is regularly tested it is unnecessary to request a special test before using it. In the case of a school lunch unit located in a community having no approved water supply, it is the responsibility of the sponsor to have the water tested and approved before the unit opens and at frequent intervals thereafter.

Hot and cold running water in the kitchen and cold running water in the lunch room are highly desirable. The minimum requirement is an adequate supply of safe water on or very near the premises. Covered containers should be provided for carrying the water from the source. Water must not be allowed to stand in the kitchen in uncovered containers. A covered barrel or tank with spigot for drawing the water is required for storage of water. This container should be drained and thoroughly cleaned and sterilized at least once a week.

A sanitary drinking fountain or paper cups for drinking water for the workers should be provided in accordance with WPA safety regulations. The use of a common dipper, cup, or glass should not be tolerated.

B. Water Disposal. In the absence of a plumbing system, disposal of water is subject to approval by local health officials.

C. Toilets. Toilets which are kept in a clean and sanitary condition must be provided for the use of school lunch workers. If toilets are used by other persons, it is the sponsor's responsibility to provide for the cleaning.

D. Screens. All windows, doors, and other openings in rooms used for school lunch purposes should be screened for protection from flies and other insects. Removable screens of fine wire

mesh are recommended. Mosquito netting is a possible substitute. Screens should fit tightly and be kept free from breaks. If windows open from both top and bottom the whole opening should be screened.

E. Garbage Disposal. Garbage and trash should be kept in covered, water-tight metal containers. It is the sponsor's responsibility to remove garbage and trash from the lunch room daily and dispose of it in accordance with local health department regulations. It is the WPA workers' responsibility to keep the containers in a sanitary condition. Garbage cans should be washed and scalded daily.

F. Sterilization of Dishes. It is imperative that all dishes and tableware used by the children in the lunch room be sterilized. Applicable regulations in the state and local code for food handling establishments should be observed. Where there are no such regulations local health officials should be consulted. A recommended procedure for washing and sterilizing dishes is given in Section 37.

Section 14. Equipment. The kind and amount of equipment required for a school lunch unit will be governed by the number of children to be served and the type of menu used. Certain items are fundamental and will be needed on every unit.

A. Kitchen Equipment. The following is a list of minimum equipment needed to carry on food preparation, cooking, and cleaning activities:

Stove
Work tables
Stool for worker
Cupboard or cabinet for supplies
Covered containers for supplies
Accurate measuring utensils
Mixing bowls, assorted sizes
Mixing spoons, preferably wooden
Table spoons
Teaspoons for tasting
Butcher knife, paring knife
Can opener
Large fork
Vegetable brush
Wire egg beater
Wire strainer
Covered cooking utensils large enough for required number of servings
Tea kettle
Colander
Baking pans
Hot pan holders
Dish pans
Dish cloths
Dish towels
Dish drainer
Cleaning cloths
Broom, dust pan
Mop, mop pail
Towel rack or clothes line
Garbage and trash containers
Clock

Additional equipment such as that listed below is convenient. It makes for efficiency and permits greater variety in food preparation:

Refrigerator
Covered refrigerator dishes
Pressure cooker
Additional cooking utensils, including frying pan and double boilers
Food grinder
Chopping bowl and chopper
Cutting board
Shears
Spatulas, various widths
Rotary egg beater
Apple corer
Fruit juice extractor
Potato masher
Potato ricer
Grater
Flour sifter
Bread board
Rolling pin
Biscuit cutters
Cooky cutters
Cooky press
Baking sheets
Roasting pans
Dutch oven
Covered baking dishes
Custard cups
Muffin pans
Cornbread stick pans
Cake racks
Ladles
Pitchers
Trays
Rubber dish scrapers
Rubber drain board mats
Knife sharpener
Asbestos mats

Standards for Major Equipment.

Stoves. The stove should provide sufficient space for the efficient preparation of the types of dishes to be included on the menus. Gas or electric stoves with temperature controlled ovens are desirable, but kerosene, wood, or coal ranges in good working condition are acceptable. As a minimum a two burner stove with portable oven should be required. For large units and for central kitchens serving a large number of schools institutional type ranges, baking ovens, and steam jacketed kettles are desirable.

Refrigerators. A well insulated refrigerator, with porcelain enamel finish inside and out is desirable. It may be either iced or mechanically cooled. A well built, wooden refrigerator, adequately insulated to maintain a safe temperature is acceptable.

Work Tables. Work tables should be substantial in construction with smoothly finished non-absorbent tops. They should be of a height which will permit proper posture of workers. Linoleum, stain-resistant metal, and hard wood with water proof finish make good working surfaces.

Sinks. It is desirable that school lunch units be equipped with separate sinks for dish washing and for washing vegetables and also a hopper for washing mops and other cleaning equipment and disposal of water used for cleaning purposes. Double or triple sinks are convenient for dish washing. If only one sink is available separate pans should be provided for washing dishes and vegetables. Stainless metal or porcelain enamel sinks are preferred. Other satisfactory materials are iron and soapstone. On small rural units it is possible to use home-made sinks constructed from oil drums. Sinks should be installed at a height to permit working without stooping.

Cooking Utensils. Steel or heavy aluminum kettles and saucepans are safest and most desirable. Enamel ware, especially inexpensive types, is not a good investment as it chips and must be replaced frequently. If it is used, extreme care must be taken to prevent bits of enamel from getting into the food. Iron is a satisfactory material for frying pans and Dutch ovens. If necessary some cooking utensils may be improvised from lard cans and other tin containers.

Towel Racks. Rack or line space should be adequate for drying a day's supply of towels. Racks permanently attached to the wall are desirable if space permits; otherwise a folding clothes rack is convenient. Towel rods may be improvised from broom handles or a rope line may be stretched in the kitchen at the end of the day if towels cannot be hung outside in the sun.

Garbage and Trash Containers. These should be of metal, water tight and covered, adequate to hold one day's waste. Lard cans or other tin receptacles with covers may serve the purpose.

B. Lunch Room Equipment. Since a child's attitude toward food is influenced by the conditions under which it is eaten, the lunch room should be made as attractive and comfortable as possible. Crisp curtains at the windows, flowers and plants, pictures and posters on the walls will help make the room cheerful and inviting.

In accordance with Operating Procedure G-5, section 13, "Arrangements shall be made to insure that chair and table space is available for each child while eating." Under no circumstances shall "stand up" lunches be permitted. If no other provision for seating is possible, the children may sit at their desks in the classrooms.

Chairs (or benches which may be used in place of chairs if necessary) and tables should be of a height that will enable the children to eat their lunch in comfort. They should be able to sit well back in their chairs with their feet touching the floor and use their hands freely above the table top. Where children of all school grades are served, it is desirable to have chairs and tables of three different heights. If low tables cannot be provided in the lunchroom for very small children it may be best to serve them in their school rooms.

Tables seating about twelve children are preferable to larger ones. They should be of sturdy construction. Collapsible tables consisting of boards laid across saw horses are not desirable. Table tops should be smooth and easily kept clean. They may be painted, varnished, waxed or otherwise treated to make them non-absorbent. Linoleum in suitable designs and attractive colors, cemented to the table top, makes a satisfactory surface. Oilcloth may be used to cover rough board tables. However, tables which are smooth and attractively finished should not be covered.

It is desirable to have the following equipment for serving each child:

Plate
Bowl
Cup and saucer
Dessert dish
Dessert plate
Fork
Teaspoon
Tumbler

As a minimum a plate, bowl, cup or tumbler, fork, and teaspoon should be provided.

Every effort should be made to secure dishes attractive in color and pattern which will be appealing to children. A good quality institutional tableware is most economical in the long run. Although the initial cost is greater than that of dishes of an inferior quality it is far more durable and replacement costs will be less. The use of tin or enamel ware dishes should be discouraged. Children should never be required to bring dishes from home.

Dishes which are cracked, crazed, or chipped should not be used as they are unsanitary as well as unsightly. Special precautions should be taken to avoid use of glasses or cups with chipped rims since they are unsafe. Only safety edge tumblers should be purchased.

Forks and teaspoons should be strong, free from sharp edges, easy to hold, and of a non-absorbent finish.

A clean napkin should be provided for every child at every meal. Paper napkins are most practical. However, cloth napkins have definite value in teaching children the niceties of table service. Attractive place mats are also recommended for the same reason. When lunches are served on desk tops the use of some type of place mat shou be required. It is possible to use paper napkins for this purpose.

If cloth mats or napkins are used provision should be made for laundering them on the project so that each child may have a fresh one daily.

C. Serving Equipment. For convenient serving, tables large enough to hold the kettles or pans of cooked food and the dishes to be filled are needed. In a small unit the work table may be cleared at serving time and used for this purpose, if a separate table cannot be provided.

Serving utensils include ladles for soups and stews, serving spoons for vegetables and desserts, and pitchers for beverages. A pitcher is also convenient for serving soups which pour easily. Serving trays should be provided for carrying the filled dishes to the tables. These should be strong, light in weight, and of a material which will not buckle.

For cafeteria service a long counter, table, or series of tables providing sufficient space for an orderly arrangement of food and dishes, is necessary. Steam tables for keeping food hot during the serving period are desirable where the number of children served is large. If this equipment is not possible, cooling may be retarded by setting kettles of food in containers of hot water.

Cafeteria service requires the use of individual trays, adequate in size for holding a plate, a glass, dessert dish, and other dishes usually used for the school lunch.

D. Layout of Equipment. Since space which was originally designed for some purpose other than the preparation and serving of food is often provided for a school lunch unit, an ideal layout is seldom possible. However, careful plans should be made for the most efficient work routine possible within the limitations of the space available. The various steps in the preparation and serving of a

meal should be analyzed and equipment so placed that the work may progress in an orderly manner without waste motion or interference between workers. Centers for the various activities should be set up so that progression of work will be around the room rather than back and forth across it. In a square room a work table in the center might prove to be a good arrangment while in a long narrow room it might be better to place all equipment against the walls, leaving the center free for passage. If possible, cupboard or shelf space should be included at each work area for convenient storage of the utensils and supplies necessary for the activity.

Stoves should preferably be placed so that there will be access from three sides.

Serving tables should be placed at a point as near as possible to both stove and lunch tables, When cafeteria service is used the counter should be in or adjoining the lunch room so that children will not have to carry trays for long distances or walk through preparation and cooking areas.

Part V. Organization and Management of Work

Section 15. Analysis of Work. The successful management of a school lunch unit is largely the responsibility of the unit supervisor. In order that the work may be efficiently organized and planned, it will be necessary for the supervisor to make a careful analysis of the jobs to be done. These jobs may be classified as daily, weekly, and occasional duties. Following are typical tasks falling in these various classifications:

Daily

Assignment of workers to specific duties for the day.

Ventilation of cooking and serving rooms.

Dusting or cleaning of all working and serving surfaces.

Assembling supplies from store room.

Preparation of food to be served.

Washing of dishes and utensils used in preparation.

Arranging kitchen and lunch room for serving.

Serving lunch.

Clearing tables and putting lunch room in order.

Storing of left over foods.

Washing, sterilizing and putting away dishes.

Cleaning equipment--stove, sink, refrigerator.

Washing dish cloths, towels, and dust cloths; napkins and place mats if used.

Sweeping floors; mopping if necessary.

Removing garbage and waste; sterilizing the containers.

Final checking of lunch room, store room, and serving rooms to see that everything is in order.

Checking menus and recipes for following day to determine supplies needed and plans necessary for advance preparation.

Making daily reports.

Weekly

Thorough cleaning of refrigerator, stove.

Cleaning of sink drain pipe.

Thorough cleaning of shelves, drawers and cabinets, changing shelf paper.

Washing window sills and removing finger marks from doors and other wood work.

Thorough cleaning of store room.

Polishing silver.

Occasional

Washing windows, cleaning screens and shades.

Waxing linoleum.

Special cleaning and waxing of furniture in lunch room.

Special cleaning of mechanical equipment.

After analyzing the jobs to be done daily, weekly, and occasionally, it is recommended that as a guide in making assignments, they be grouped according to types. Following are suggested groupings with examples of jobs falling in each group:

Management jobs. Making or adjusting menus; checking and ordering supplies; keeping records; making work schedules; arranging store room.

Food preparation jobs. Assembling supplies and equipment, preparing lunch; advance preparation of food to be used following day.

Serving jobs. Preparing room for serving; setting tables; serving dessert and milk; serving plates.

Cleaning jobs. Sweeping and mopping floors; washing tables and woodwork; cleaning stove and refrigerator.

Dishwashingjobs. Assembling and preparing for washing; washing, sterilization and draining; putting away.

Section 16. Work Schedules. A supervisor's careful analysis of the wor to be done on a school lunch unit is necessary before she can prepare work schedules of daily, weekly and occasional duties to be performed by each worker. The schedules should be simple and specific in order that workers may easily understand them and should be posted on a bulletin board in the work room in typed form.

It should not be necessary for a supervisor to make separate work schedules for each day. If the schedules are well planned they can be used day after day and week after week. For example the following daily schedule for a helper could be used for an indefinite period:

Sample Daily Schedule of Work for Helper
(Children Served at Table)

Step	Time		
1.	8:30 to	10:00	Prepare vegetables to be cooked.
2.	10:00	11:00	Wash off tables in lunch room and set them.
3.	11:00	11:30	Wash dishes used in preparation. Serve dessert in individual dishes and place on table.
4.	11:30	12:00	Pour milk in glasses. Assist cook in serving plates.
5.	12:00	12:30	Childrens' lunch period--assist in serving children--pass breadstuff, serve second glasses of milk.
6.	12:30	1:00	Workers lunch period.
7.	1:00	2:00	Remove dishes from tables--wash tables, sweep lunch room, mop if necessary.
8.	2:00	2:30	Assist cook in washing, sterilizing, and putting away dishes.
9.	2:30	3:00	Remove garbage and sterilize container, sweep kitchen.

This schedule would be applicable for a unit employing one cook and one helper. However, the same schedule, with a few adjustments, might be used by several helpers on a larger unit. When workers are first assigned it may be necessary for a supervisor to make specific daily plans for cooks and helpers until they become accustomed to the routine of their jobs. Following this section is a step by step plan of work for a lunch to be prepared by one cook and one helper for 50 children.

Supervisors should bear in mind that unless work schedules are usable they have no value. The form in which they are prepared must be one which can be quickly read. The schedule following this section is suggestive of a type of form which may be used for a unit employing 4 workers to prepare and serve lunch for 125 children, using the menu in the step by step plan.

Sample Plan of Work for 2 Worker Unit
(Children served at Table)

MENU

Creamed Dried Beef
with
Mashed Potatoes
Whole Wheat Sandwich with
Carrot Filling
Canned Peaches
Milk

Step	Cook	Step	Helper
1.	Assemble supplies from store room	1.	Make preliminary preparations such as filling tea kettle, et
2.	Make white sauce.	2.	Peel potatoes.
3.	Put potatoes on to cook.	3.	Scrape carrots.
4.	Combine dried beef with white sauce.	4.	Cut up dried beef.
5.	Grind or chop carrots and mix with salad dressing.	5.	Clean tables and set them.
6.	Spread bread with butter and sandwich filling and cover with moist clean towel.	6.	Place peaches at individual places.
7.	Serve peaches in individual dishes.	7.	Pour milk in glasses and place on tables.
8.	Mash potatoes.	8.	Assist cook in serving plates.
9.	Take food to serving table	9.	Place plates on tables.
10.	Serve potatoes, creamed dried beef and sandwiches on individual plates.	10.	Remove dishes from tables and clean off tables.
11.	Serve second helpings.	11.	Place garbage in closed container for janitor to remove.
12.	Put leftover food in refrigerator or cold room.	12.	Scrape, wash and sterilize dishes, leaving to drain.
13.	Check menu and supplies for following day.	13.	Sterilize garbage container.
14.	Prepare daily records.	14.	Put away dishes.
15.	Make cookies for following day.	15.	Sweep floor and mop if necess
16.	Clean cook's working area.	16.	Straighten lunch room.

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Schedule of Jobs for 4 Workers
(125 Children, Served at tables in two groups)

Time	Cook	Helper #1	Helper #2	Helper #3
8:30 to 10:00	Scheduled to arrive at 10 AM in order that she may remain in afternoon to prepare food for following day.	Make preliminary preparations for preparing food such as filling tea kettle, etc., peel potatoes, cut up dried beef.	Scheduled to arrive at 10:AM in order that she may assist cook with preparations for following day.	Wash and scrape carrots, grind or chop for sandwich filling. Wipe off tables in serving room.
10:00 to 11:30	Assemble supplies. Mix sandwich filling. Make white sauce. Put potatoes on to boil. Combine dried beef with white sauce.	Set tables. Place peaches on tables.	Open canned peaches, serve in individual dishes. Assist in making sandwiches	Cream butter for sandwiches. Make sandwiches. Prepare kitchen for serving period.
11:30 to 12:00	Mash potatoes. Serve plates, keep food warm for second group.	Pour milk. Assist cook in serving plates. Place served plates on table.	Put sandwiches on plates. Assist in placing plates on table.	Wash utensils used in preparation of meal.
12:00 to 1:00 (Serving period for children)	Serve second helping. Serve plates and dessert for second group.	Assist cook in serving; set tables for second group	Make preparation for dish washing. Remove dishes from tables. Wash and sterilize dishes for 2nd group of children.	Assist helper #2.
1:00 to 1:30 Workers Lunch Period				
1:30 to 2:30	Put away leftover food. Check menu, supplies and recipes for following day.	Clear tables, stack dishes for washing. Wash tables in lunch room.	Clear tables, stack dishes for washing sweep lunch room mop if necessary.	Wash and sterilize dishes.
2:30 to 3:00	Prepare daily records. Order necessary supplies. check on organization of store room.	Assist cook with store room. Wash dish towels.	Sterilize garbage can after garbage disposed of.	Finish dishes and put away.
3:00 to 4:30	Preparation of food to be used on following day.	*********	Assist cook in preparation of food, wash dishes and put kitchen in final order.	*********

Section 17. Work Standards. As an outgrowth of the supervisor's careful planning and scheduling of jobs to be done workers should develop an attitude of cooperative responsibility and should perform their jobs with punctuality, orderliness, cleanliness, and systematic routine. To help in this accomplishment the supervisor should assist workers in developing desirable work standards such as:

Following directions accurately to insure good results.

Planning every job before starting it in order to save time and energy.

Washing hands frequently as a sanitary measure.

Using hand towel instead of dish towel for drying hands in order to comply with sanitary standards.

Keeping working surfaces clean at all times to expedite work in doing a job.

Sweeping or mopping the floor immediately after anything is spilled in order to avoid accidents.

Keeping preparation dishes washed as they are used to save time and energy and to help maintain orderliness.

Serving food carefully and attractively so that it will appeal to the children.

It will be possible for a supervisor to establish the above standards of work by giving accurate instructions to workers and by constantly training them on the job.

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Section 18. Safety Precautions in the Kitchen. It is important that every worker on the school lunch project realize her responsibility in keeping the kitchen a safe place in which to work. The following precautions should be observed:

> Any water, grease, or vegetable parings or other bits of food dropped on the floor should be taken up immediately as they may cause workers to slip.
>
> Articles on shelves should be firmly placed so they will not fall if jarred.
>
> Boxes, mops, brooms and other articles should never be left for a moment where workers might stumble over them.
>
> Cooking utensils should be placed on the stove with handles turned so that workers will not brush against them and knock them off.
>
> If storage shelves are above the reach of the workers, a step stool of safe construction should be provided. Climbing on chairs or opened drawers is not a safe practice.
>
> Kerosene should be stored in safety cans; oily rags and matches in tightly covered metal containers. Used matches should be dropped into a tin or glass container provided for that purpose, never into a trash basket.
>
> Care should be taken when lighting all types of stoves; kerosene should never be used to start a wood or coal fire; doors of gas ovens should be opened when lighting the oven burner; ashes from coal or wood stoves should be placed in metal containers.
>
> Pot holders should be kept dry. When a hot dish is handled with a wet holder the resulting steam may cause burns.
>
> Sharp knives should be kept in knife holders and should not be stored loose in a drawer; knives with loose handles should not be used since there is danger of the blade slipping.
>
> Can openers with exposed blades should be avoided.
>
> Lids from steaming kettles should be removed with care.
>
> Fat catches fire easily, therefore it should be closely watched to prevent overheating in broilers or utensils on top of the stove.
>
> Severe burns may be avoided by turning on hot water faucets cautiously.

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Part VI Planning Food for School Lunch Projects

Section 19. Provisions for Securing Food Supplies. An adequate supply of food materials is fundamental to the operation of a school lunch project. The preliminary planning with sponsors and cosponsors for the establishment of a unit should include provisions for securing the foods which will be needed throughout the year. In order that the sponsors may make an adequate plan it is necessary that they know the general types of foods and the estimated quantities required weekly for a specified number of children. They will need information also regarding the items expected to be available as surplus commodities and the amount of produce anticipated from gardening and food preservation projects. It should be made clear to the sponsor that, because of the nature of the Surplus Marketing Administration's program, surplus commodities cannot be counted on to furnish a sufficient variety of foods for adequate lunches at all times. The sponsor should be responsible for securing from local organizations and individuals in the community cash contributions for the purchase of foods needed in addition to surplus commodities and garden produce, or contributions in kind in amounts sufficient to meet the requirements. Advisory committees can be of assistance in working out the details of the plan.

Contributions in kind should be definitely scheduled in advance and arrangements made for their delivery to the project at a stated time according to specific menu plans for a given period. Daily contributions of food brought from home by the children should be prohibited. It is seldom possible to use these small quantities to advantage in carrying out the planned menus. Moreover, in many instances, the making of such contributions means that the family is deprived of food needed at home. Families financially able to contribute to the school lunch program should do so on a scheduled basis in accordance with the general plan set up by the sponsor.

Section 20. Centralized Menu Planning. Uniformity of operation and maintenance of good nutritional standards are best achieved when the planning of menus is centralized rather than handled by individual units. In the majority of states the district will be the logical basic unit. This does not mean, however, that the same menu will be used by every school throughout the district. It may be necessary to provide several types of menus to meet varying conditions which exist in different localities within the district.

It is recommended that the district technical supervisor of the school lunch project be responsible for the planning of menus. Where there is no technical supervision at the district level, the state supervisor should plan menus adapted to the different types of lunches served throughout the state. These should be distributed to the districts in accordance with their needs. Since surplus commodities, contributions in kind, and fresh produce available in local markets vary within a state and within a district, the person doing the planning must have accurate information on availability of supplies. Suggested menus which do not fit a local situation have little value. A plan for securing adequate information for centralized menu planning should be worked out by state and district offices.

In states where the organization of the project does not make centralized planning feasible, menus planned by unit foremen or cooks should be checked and approved by a technically qualified person. Home economics teachers, home demonstration agents, and public health nutritionists are usually glad to give this assistance.

School officials and teachers should recognize that it is the responsibility of WPA workers on a school lunch unit to prepare and serve the menus as planned. They should cooperate with the workers in seeing that the plans are carried out and should not request changes in menus. All suggestions

for menus should be made in advance to the persons responsible for the planning.

Minor changes may be necessary in centrally planned menus, since it is not always possible in every locality to obtain the specific foods at the time they appear on the scheduled menu. All changes made should be recorded and reported to the person responsible for menu making. A suggested form for this purpose is given at the end of this section.

It is recommended that menus be planned for not less than one week or more than two weeks at a time. When detailed plans are made for longer periods of time numerous changes are usually necessary. Menus should be in the hands of the unit supervisor or cook at least one week in advance of the period during which they are to be used so that the necessary arrangements for delivery of supplies can be made. This necessitates careful planning from the state and district offices.

Suggested Form for Recording Changes in Planned Menus

Date	Oct. 7	Oct. 8	Oct. 9	Oct. 10	Oct. 11
1. Main dish planned	Cream of potato soup	Meat loaf	Macaroni and cheese	Vegetable soup (meat stock)	Scalloped salmon
2. Main dish served					
3. Reason for change					
1. Supplementary dish planned	Cabbage and carrot salad	Stewed tomatoes	Harvard beets		Buttered green beans
2. Supplementary dish served					
3. Reason for change					
1. Breadstuff planned	Egg sandwich	Corn bread	Whole wheat bread	Toast squares	Whole wheat muffins
2. Breadstuff served					
3. Reason for change					
1. Dessert planned	Oatmeal cookies	Apple sauce	Oranges	Rice pudding with raisins	Fruit gelatin
2. Dessert served					
3. Reason for change					
1. Drink planned	Grapefruit juice	Milk	Milk	Milk	Milk
2. Drink served					
3. Reason for change					

This suggested form provides a medium for the distribution of planned menus to individual school lunch units and a record of any changes made by the unit head. The first line in each block is to be filled in by the person planning the menus. The second and third lines will be filled in by the unit head. The form should be prepared in duplicate, one copy to be returned to the office in which menus are planned, the other to be retained by the unit.

Section 21. Essential Foods for Children. Children must have not only a sufficient amount of food but also the right kinds of food if they are to be healthy in every way. For good nutrition, the Children's Bureau, United States Department of Labor, and the Bureau of Home Economics, United States Department of Agriculture, recommend that children have the following foods every day:*

Milk	$1\frac{1}{2}$ pints to 1 quart
Butter	At every meal
Vegetables and fruits	At least 4 servings 1. One of the following: oranges, grapefruit, tomatoes, green leafy vegetables, cabbage, turnip 2. A green or yellow vegetable, a yellow fruit, or tomatoes 3. Potatoes - at least one serving 4. Another serving of some kind of fruit or vegetable
Eggs	One a day if possible. At least 4 or 5 a week
Meat or fish	Once a day or at least 4 times a week
Cereals and bread	One serving of cereal Bread according to appetite and energy needs, perhaps at every meal
Sweets	For dessert, if appetite allows, after the other foods listed have been eaten

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*Well-Nourished Children, Folder 14, Children's Bureau, United States Department of Labor, in cooperation with Bureau of Home Economics, United States Department of Agriculture.

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Since for many children the lunch served at school is the main meal of the day, even in some instances the only meal they can count on, it is important that it supply foods from as many of the above groups as possible and constitute a substantial portion of the day's requirements. It is generally true that the home diet of children from underprivileged families is high in starchy food such as potatoes, bread, cornmeal, and beans, and lacking in milk, vegetables, fruits, eggs, and meat. In the school lunch menus, therefore, the latter foods should be specially emphasized in order to make up for the deficiencies in the meals served in the homes.

A menu for a complete, well-rounded school lunch will include the following foods:

At least one-half pint milk for every child

Meat, fish or eggs

Two vegetables, or a vegetable and a fruit. An additional vegetable or fruit is desirable

Whole grain cereal, in bread or other form

Butter or other fat

A simple sweet

The serving of such a meal in every unit is the goal of the WPA School Lunch Program. However, where it is not possible for a community to provide the variety of food and the cooking and serving equipment necessary for this type of meal, the idea of a school lunch project need not be abandoned. A meal which is less complete, or even a single dish, if carefully planned, can make an important contribution to the total daily requirements of the children. It may also serve to demonstrate the value of the school lunch program to the community with the result that provisions for serving a complete meal will eventually be made.

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If the lunch is limited to one dish, that dish should contain a variety of different foods which will be satisfying of high nutritive value. It should be supplemented by bread and butter, and milk to drink, if possible. WPA assistance should not be provided to prepare and serve a totally inadequate one-dish meal, as for example, a lunch consisting of only a cup of cocoa, a bowl of thin soup, a dish of cereal, or a sandwich.

In planning menus for the school lunch, the following points should be kept in mind:

> Lean meat is best for children; beef, lamb, and poultry are preferable to pork and veal. Liver is a meat which should be served often. Of the fish, those from salt water make a particularly valuable contribution to the diet. When it is not possible to include meat or fish every day, eggs may be substituted once or twice a week. Cheese, peanut butter, and dried beans and peas are good food to supplement lunches low in meat.
>
> The cereal products used should be, for the most part, those made from whole grains as they contain valuable nutritive elements which are removed by refining processes. Products such as grits, rice, macaroni, and noodles should be classed as cereals, not vegetables.
>
> Butter is the most valuable fat for a child's diet. Some brands of oleomargarine have the same food value and may be used in place of butter.
>
> Molasses, cane and sorghum sirups, brown sugar, and honey are particularly good forms of sweetening for deserts for children. Dried fruits such as prunes, figs, apricots, and raisins not only satisfy a child's appetite for sweets but add to the nutritive value of a lunch.

Children should have only foods which are easy to digest and which are not so sweet or highly seasoned as to impair their taste for simpler dishes. The following are foods which it is best to omit from school lunch menus:

Pastries, rich puddings, pancakes

Heavily spiced foods

Fried foods: doughnuts, fritters, fried pies, fried potatoes, fried meats

Pickles and highly seasoned relishes

Frankfurters, bologna, and other sausages

Fat meats, except bacon, which should be cooked until crisp.

Tea and coffee should never be served to children.

Cocoa should be served only occasionally. Its frequent use is likely to destroy the children's appetite for plain milk

Section 22. Quality of Food. It is of utmost importance that only safe food be served on school lunch projects. This means food of good quality which has been properly handled and stored to prevent contamination and spoilage.

A. Milk. Bottled, pasteurized milk is, in general, the safest form of fresh milk for use on school lunch projects. Raw milk should not be served for drinking. Any raw milk furnished should immediately be heated to destroy bacteria. This may be done by either of the following methods:

1. Boiling. Put the milk in a kettle large enough to allow it to boil up well. Bring to the boiling point and boil for 3 minutes, stirring occasionally to prevent scorching. Remove from the heat immediately and cook quickly by placing the kettle in cold water, preferably ice water, and changing the water as it becomes warm. Put into a refrigerator as soon as cool.

2. Heating in Double Boiler. Use a double boiler that has twice the capacity of the quantity of milk to be heated; for example, a gallon size for 2 quarts of milk. Put the cold milk into the top part of the double boiler, and cover. Put cold water into the lower part, having it touch the upper container. Heat until the water boils and keep it boiling for 8 minutes. Cool and store the milk in the manner described above. By this method the danger of scorching is avoided, but it is less safe than boiling as results with respect to destroying bacteria are less uniform. It should, therefore, be used only for cooking.

If fresh milk is not available, or if it is expensive or of questionable quality, evaporated milk or dry milk may be substituted. When the water is added to make up for that which has been removed in processing, both evaporated and dry whole milk have the same food value as fresh whole milk.

Fresh or dry skim milk or buttermilk may be used in place of whole milk when plenty of butter is included in the school lunch.

B. Meat. Only meat which conforms to state and local Health Departments regulations should be used. Contributions of fresh home-dressed meat should not be accepted.

C. Fresh Vegetables and Fruits. These should be sound, neither under ripe nor over ripe. Fruits and vegetables which have begun to decay should not be served. Particular care should be given to the washing of fruits and vegetables served raw.

D. Canned Foods. Home canned meats and home canned non-acid vegetables are not considered safe for use on school lunch projects, since methods of canning used in the home cannot always be depended on.

E. Left-over Foods. Left-over cooked foods which have not been properly cared for may be a source of food poisoning, particularly those containing eggs, milk, or fish. Left-overs should be cooled quickly and stored in a refrigerator. Unless adequate refrigeration is available cooked food left from a meal should not be held over.

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Section 23. Factors Determining Type of Meal. The general type of menu to be served, whether it is a complete meal, a single dish, or something between the two, will be determined by the amount and variety of food provided to supplement surplus commodities.

In working out specific menus to conform to the general plan, the following factors must be taken into consideration:

> Amount of labor available. When the number of workers is small in proportion to the number of lunches served, dishes requiring a minimum of work in preparation should be selected. On the other hand, in small schools where it is difficult to schedule a full six-hour day for the worker, dishes which take more time to prepare may be used. For example, in the latter situation potatoes might be served scalloped or baked and stuffed, while if the amount of labor were limited plain baked potatoes would be more practical.
>
> Ability of cooks. Since, as a rule, the workers on school lunch projects have had limited experience in food preparation only such dishes as can be successfully prepared in quantity by the average cook should be included in the menus. Complex dishes, requiring special skill in preparation, should be excluded.
>
> Cooking facilities. In planning for hot dishes and baked foods the amount of stove and oven space must be taken into consideration. For instance, where top of the stove space permits, meat and vegetables may be prepared separately, while if only one burner is available they will be cooked together in a stew, soup, or other combination. If food is prepared in a central kitchen, the types of containers used in transporting it to the schools will govern the kinds of dishes included in the menu.
>
> The season. At any season of the year the school lunch should be a substantial meal, usually including a hot dish. However, the kinds of food and the types of dishes should be varied to adapt the menus to the different seasons. Children's appetites and food requirements, like those of adults, vary with the seasons. In warm weather special emphasis should be placed on the lighter foods such as eggs, cheese, salads, cream soups, and simply prepared vegetables, rather than on meats, heavy soups and stews, and more substantial vegetable combinations which form the basis of winter meals. For example, on a warm day cheese and rice souffle, raw carrot salad, bread and butter sandwich, and apple sauce would constitute a more acceptable lunch than pot roast with potatoes and carrots, hot muffins and apple betty.

Section 24. Menu Patterns. The basis of a school lunch menu should be a substantial main dish. From that foundation, various patterns can be developed, each depending on the ingredients which go into the main dish. If it is not possible to serve a complete meal every day, special care should be taken to see that the menus served during the course of a week contain all of the different types of food children need (see section 20.) One way of accomplishing this is to follow a different menu pattern each day in the week.

The following are suggested as acceptable patterns for the school lunch. Other suggestions are given in "School Lunches Using Farm Surpluses" United States Department of Agriculture, Miscellaneous Publication No. 408.

PATTERN	EXAMPLE
Meat, fish or eggs combined with or supplemented by one or more vegetables. Bread and butter Fruit Milk	Meat loaf, baked potatoes, spinach or Scalloped eggs and peas. Whole wheat bread buttered Apple Sauce Milk to drink
Vegetables (as vegetable plate, soup, or other combination). Substantial sandwich (meat, fish, eggs, cheese, peanut butter) Cereal dessert Milk	Baked beans, beets, cole slaw or Creamed mixed vegetables Peanut butter sandwich Corn meal and raisin pudding Milk to drink
Cream soup (made with milk) Raw vegetable Bread and butter Cookies or cake Fruit juice	Cream of potato soup Raw carrot salad Brown bread buttered Sponge cake Grapefruit juice
Soup or chowder, including meat or fish Green vegetable Bread and butter Fruit dessert Milk	Fish chowder with potatoes and onions Wilted lettuce Buttered whole wheat toast or sandwich Prune and apple betty Milk to drink

PATTERN	EXAMPLE
Salad containing meat, fish, eggs, or cheese, and vegetable	Cottage cheese and tomato salad or Salmon and potato salad
Bread and butter	Buttered oatmeal muffins
Fruit dessert	Canned peaches
Milk	Milk to drink
Vegetable or fruit salad	Apple, orange, and prune salad
Substantial sandwich (meat, fish, eggs, cheese, peanut butter)	Cheese sandwich
Cake or cereal dessert	Oatmeal drop cookies
Milk	Cocoa
Cereal combined with meat, fish or cheese	Rice with cheese sauce
Raw or cooked vegetable	Raw carrot sticks
Bread and butter	Whole wheat muffins buttered
Fruit	Raw apple
Milk	Milk to drink

One Dish Meals

When the school lunch is limited to the "one-dish" type meal, that main dish should be sufficiently substantial and served in sufficient quantities to satisfy the appetites of the children. It should combine different types of food to give nutritive balance. Variety during the course of a week should be obtained by serving a different type of dish each day. When fruit is available as a surplus commodity it should be used to supplement the main dish. It is highly desirable that bread and butter be provided daily rather than brought from home. Milk to drink should be provided, if possible, especially when the prepared dish does not contain milk.

The following are basic combinations for satisfactory one-dish meals:

Meat, fish, or eggs in combination with vegetables, for example:

Beef stew with potatoes, carrots, and onions
Scalloped ham and potatoes
Creamed fish, rice, and peas
Scrambled eggs with tomato sauce on toast or bread

Nourishing soups, such as:

Cream soup, made with milk and sieved or finely chopped vegetables.
Vegetable soup, containing a variety of vegetables, with rice or other cereal to thicken. May be made with or without meat stock.

Chowder, made with salt pork or bacon, vegetables, and milk (may contain fish or meat), for example:

Corn and bean chowder
Salt cod, or other fish chowder
Cracked wheat chowder, with potatoes, carrots and onions.

Hominy, rice, spaghetti, or other cereal product in combination with meat, fish, vegetables or cheese, for example:

Spanish rice (using tomatoes and onions)
Hominy with cheese sauce
Baked noodles with salmon
Cereal pie (corn meal, meat, tomatoes, onions)

Section 25. Pleasing Food Combinations. In planning menus the appearance and palatability of foods to be served together should not be overlooked. Children will learn more readily to enjoy a variety of wholesome foods if the meals served are pleasing in combination of color, texture, and flavor. The following suggestions are given for planning meals which are interesting.

A. Color. Color gives a pleasing appearance to foods and is important because the sight of attractive food will start the action of digestive juices before the food is tasted. A meal which is all the same color is not so interesting as one which has a mixture of contrasted colors. The following menu is illustrative of an uninteresting all-white combination:

Creamed Codfish
Mashed Potatoes
Cole Slaw
White bread and butter sandwich
Sugar Cookies
Milk

This menu could be made more appealing by the following changes:

Creamed Codfish
Baked Potato
Raw carrot and cabbage salad
Whole wheat bread and butter sandwich
Sugar cookies
Milk

Repetition of color should be avoided. For instance, carrots, sweet potatoes and oranges used in the same meal would not be pleasing because of monotony of color. Clashing color combinations such as beets and carrots should also be avoided.

While color is an important factor to consider in planning menus, supervisors should not carry it to the extreme by planning meals around a definite color scheme.

B. Texture. Texture and consistency of foods are important factors in in planning meals. There should be variety in texture of foods that are served together. Menus which combine soft, crisp, and firm textured foods will teach a child to chew properly and will aid in maintaining a healthy condition of the mouth. Contrast in texture may be accomplished through the following ways:

Serving toasted biscuit, bread, or crackers with soups and creamed dishes.

Serving some uncooked foods such as carrots, turnips, cabbage or apples at each meal.

Baking vegetables and fruits such as potatoes and apples in the skins.

Cutting vegetables for cooking in large enough pieces so they do not lose their identity in preparation.

Not over cooking vegetables and fruits.

Serving foods that do not repeat methods of preparation, for instance buttered carrots rather than creamed carrots with creamed eggs.

Children pay as much attention to consistency of food as do adults. Thick pasty white sauces, stiff corn starch puddings, soups that are too thick or too thin are often refused by children because of their unpalatable consistency. On the other hand, baked custard that has a jelly-like consistency is interesting to a child because it is both soft and firm. Very dry foods are often objectionable to children. For instance, a dry bread pudding would not be appealing while the same pudding served with a custard sauce might be very popular.

C. Flavor. Contrasting food flavors make meals more appetizing to children as well as to adults. A meal composed of all mild flavored foods lacks variety and zest. One containing too many strong flavored foods will usually not appeal to the appetite. The following menu illustrates a poor flavor combination:

Salmon Loaf
Creamed Onions
Cabbage salad
Buttered corn sticks
Sliced bananas
Milk

Foods in this menu which are strong or distinct in flavor are salmon, onions, cabbage and bananas. The menu may be made one of pleasing flavor combination by a few changes:

Salmon Loaf
Baked white potato
Cabbage salad
Buttered corn sticks
Canned peaches
Milk

Most meats and fish have a pronounced flavor and should in general be served in combination with mild flavored vegetables. Eggs, and chicken are not so pronounced in flavor and make a better combination with strong flavored vegetables.

Repetition of flavors in a meal should be avoided; for instance, tomato soup and tomato salad or apple salad and apple sauce.

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General food likes and dislikes should be considered when combining flavors. Foods which are generally popular should always accompany dishes which are not so well liked. This is an important factor in teaching children to like certain foods.

D. Variety in Preparation. Even though the number of foodstuffs generally available for the school lunch is limited, variety in menus can be secured from day to day by combining the same foods in different types of dish Take, for example, such commonly available foods as potatoes, carrots, milk, cheese, whole wheat flour, apples, and prunes. These could be used as the basis of quite different menus, such as the following:

Cream of potato soup
Raw carrot sticks
Whole wheat bread and
cheese sandwich
prune filled baked apples

Scalloped potatoes and carrots
with cheese
Whole wheat muffins
Apple and prune salad

Baked potato with buttered
carrots and half baked apple
Whole wheat cheese muffins
Stewed prunes
Milk to drink

The use of a different menu pattern each day in the week will help assure variety. However, the same pattern, and particularly the same menu or the same dish, should not be used regularly on a certain day each week. Children lose interest in their meals and the appetites are correspondingly less keen when they know in advance just what to expect on a given day.

E. Sectional, Racial, and Nationality Food Preferences. Since food preferences vary in different sections of the country and among different racial and nationality groups, school lunch menus should be adapted accordingly in order to make them acceptable to the children. However, the menus should not be limited to familiar foods prepared in familiar ways for a balanced diet is most easily achieved when it includes a wide variety of foodstuffs. Learning to like new dishes is important in building up good food habits.

Section 26. Buying Food for the School Lunch. WPA regulations do not permit project employees to handle funds provided by sponsors for the purchase of food for school lunch projects. However, in some instances unit supervisors, foremen, or cooks are given the responsibility of selecting and ordering the food. Persons who have such responsibility should know how to buy economically in order to make the money available go as far as possible. Economies can be effected in the following ways:

Prepare market lists for a week's supplies at a time and place orders in advance instead of buying the materials needed, with the exception of perishables, from day to day.

Buy staples which can be stored for some time without deterioration in the largest quantities consistent with the amounts used, the amount of money which can be spent at one time, and the storage space available.

Buy bulk rather than packaged goods, taking care that they have been properly protected from dust and flies and handled in a sanitary manner.

Buy canned goods by the case and in large rather than small cans. Arrangements can usually be made with local dealers to secure large cans if they are not regularly stocked.

Read labels on cans, noting grade, weight of contents, and other information given, in order to compare values.

Buy "standard" rather than "choice" or "fancy" grades which are more expensive.

Substandard grades are foods of wholesome quality and may be purchased for some purposes.

Broken pieces, which cost less than whole or sliced fruit, are sometimes available and are equally satisfactory for most purposes. Pink salmon is less expensive than red and is practically equal in food value.

If funds are extremely limited buy skim milk or buttermilk, provided butter is supplied to furnish the butter fat.

Buy fresh fruits and vegetables only in season when they cost no more than canned. Dried fruits, bananas, and apples give good returns in food value for their cost.

Buy the cheaper cuts of meat. They are just as nutritious as the choice cuts and can be made tender and appetizing with proper cooking. Im comparing the relative cost of different cuts the proportion of bone, fat, and gristle should be taken into account. Beef and pig's liver is much less expensive than calve's liver and equal in nutritive value. Do not buy such meats as bologna and frankfurters. Although they may be low in price they often contain only a small amount of meat and because they are highly spiced they are not good food for children.

Do not buy ready-cooked foods when the same food could be prepared on the project or some other food substituted. For example, make salad dressings instead of buying commercial products which are relatively expensive and often too highly seasoned for children. Cookies and cakes should also be made on the project or some other dessert served. Canned soups, prepared pudding mixtures and flavored gelatines are other products which it is not usually advisable to purchase when the amount of money to be spent is limited.

If it is not possible to bake bread on the project, buy day-old bread which can be obtained at a considerable saving. Take care to see that it is not moldy or too dry to be palatable.

Part VII Cooking Food for Children

Section 27. Cook's Responsibility for Maintaining High Standards of Food Preparation. Well balanced menus and foods of good quality will not alone assure lunches of a high standard. Careful handling of food and proper methods of cooking are essential. Too much emphasis cannot be placed on the responsibility of the cook for preparing attractive and palatable school lunches. Indirectly she is responsible for establishing good food habits in children for they will not learn to eat the proper food unless it is prepared in an appetizing manner.

Success in cooking is not a matter of the cook's luck but is the result of her thoughtful and definite planning and the care she gives to every detail. It is essential that only clean, wholesome foods be used in the preparation of all dishes. This means that the cook must pay strict attention to the following points:

Food supplies and leftovers must be protected from dust and flies at all times. Leftover cooked foods should not be used when there is any doubt as to their freshness.

Vegetables and fruits must be free from any decay.

Butter must not be rancid. The flavor of rancid butter cannot be "covered up" in cooking.

Bread that is moldy should not be served even when the visible mold has been removed by trimming.

Milk which has even the slightest sour taste must not be offered children for drinking but should be used in recipes calling for sour milk.

Meats and fish must be free from taint.

Personal hygiene of workers must be above reproach.

Tasting of food from cooking or mixing spoons must not be permitted.

Section 28. Use of Tested Recipes and Standard Measurements. It is essential that cooks be provided with tested quantity recipes that are dependable for the number of servings required. Good materials, without reliable recipes, cannot be expected to result in superior dishes. The following are reasons for using tested recipes:

Insure good food products when good materials are used.

Are the only way to control number of servings.

Avoid expense from waste of time and materials since poorly prepared foods cannot be served, or because of poor preparation, are not eaten.

Prevent children from forming dislikes for certain foods because of poor preparation.

Relieve cook of responsibility of experimenting with school supplies as she is doing when she attempts to "stretch" her own recipes.

Reliable recipes lose their value if coffee cups, dessert spoons' or saucepans are used to estimate measures or if a "pinch" of salt or other ingredients is relied upon as an acceptable measure. Standard measures are essential to the preparation of good food and are a good investment for any school lunch kitchen. They may be obtained for a very small sum. Necessary standard measures include the following.

Half-pint measuring cup which indicates 1/4, 1/3, 1/2, 3/4 and 1 cup measures. These may be had in nests that include 1/4, 1/2, 1/3, amd 1 cup sizes.

Standard measuring spoons in sets including 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon, and 1 tablespoon.

A quart cup and a gallon measure should be included when 25 to 50 servings are prepared.

If two measures are used, one for liquid and one for dry ingredients, it will save the necessity of washing them between times.

Another important factor in the use of standard recipes and a necessity in the production of good food is accuracy in measuring. All standard recipes are proportioned for level measurements. "Scant" or "heaped" or "slightly rounded" are not dependable terms in measuring foods. Success in preparation and accuracy in number of servings depend on level measurements.

In increasing quantity recipes, it is safer to make one recipe two or three times than double or triple the amount of each ingredient. For instance, in preparing food for 150 children, a recipe for 50 servings might be used but should be made 3 times. This insures better flavor and more uniform texture of prepared foods.

Section 29. Factors Determining Amount of Food to be Prepared.

The number of children to be served is not the only information necessary in planning for an adequate amount of food for the school lunch. The following factors must also be considered.

> Age of Children. Younger children usually require less food than older children. Quantities of food prepared may need to be increased with the increase in age of children served.
>
> Type of Menu.. If a one dish meal is served a larger quantity of food materials will be needed in preparation, than if the menu includes three or more foods. At least one food in each lunch, other than bread and butter or dessert, should be prepared to give as many second or third servings as desired. If servings are checked, the quantity needed can soon be controlled so there will be no problem of leftover food.
>
> Day of the Week. Increase in quantity of food is to be expected at the beginning of the week and after holidays as many children are especially hungry on those days because they have not had adequate food at home.

Children who are extremely undernourished or who have acquired poor habits of eating may require the utmost patience on the part of the cook while they are becoming adjusted to a normal food intake. It may require several days for the child who receives his only well-balanced meal at school , to adjust his appetite to normal amounts of food. He may not be able to eat as much food as is required for his physical needs, or he may desire an abnormal quantity. In either case, a normal adjustment is usually made within a few weeks at the most. Much consideration should be given such special food problems in preparation of necessary quantities of foods.

Section 30. Cooking Methods. Methods of preparing food for children are an important consideration. Foods that are simply prepared and that keep as much of the natural food flavor as possible, make the most wholesome and attractive lunches for children. For example, fruits should be served fresh whenever possible rather than being cooked in puddings or other desserts.

In planning food for children it is important to consider texture, flavor, color, and consistency. Failure to regard these factors in preparing their food may cause children to form lifelong dislikes for certain foods.

As much of the natural texture as possible should be retained in prepared foods. Vegetables should be cut in large enough pieces so they do not lose their identity in preparation. Undesirable texture is produced when foods are overcooked or undercooked. Foods should be prepared as short a time as possible before serving since many acquire a poor texture on standing. Many foods require cooking to bring out the full flavor. On the other hand, over cooking destroys the natural flavor and should be avoided.

Seasonings should be used to emphasize, rather than to change or to disguise the natural flavor of foods. Highly seasoned foods should be avoided in preparing foods for children. Salt should be used for a child's food in smaller quantities than is used for adults. Pepper and spices should be used sparingly, if at all. Sugar should be used to emphasize flavor. This is particularly true in cooking fruits.

Scorched foods should not be served. The flavor of scorched food may cause a child to dislike that food all of his life. Milk used in cooking is particularly apt to scorch. This may be avoided by placing the pan of milk or cream sauce in a large container of hot water. A rack should be used to keep the pan of milk from touching the bottom of the container.

The natural color should be retained in foods by the method of cooking rather than by a color preservative. For example, soda added to green vegetables in cooking may preserve the green color but it destroys much of the food value and often produces a slimy texture. Many children who enjoy vegetables that are properly cooked will not eat them if they are unattractive in color. To preserve natural color in cooking vegetables the following rules should be observed:

> White vegetables such as potatoes, turnips, cabbage, and onions turn an ugly gray color from over cooking and on standing after cooking. They should therefore not be over cooked or cooked too long before the time they are to be served.
>
> Yellow vegetables such as carrots, sweet potatoes, yellow squash and yellow corn do not lose color readily except when scorched. The amount of water used in cooking yellow vegetables does not affect the color; however, only small amounts should be used in order to preserve nutritive value.
>
> Green vegetables retain more color when cooked in large amounts of boiling water. However, an acceptable color is retained when they are cooked in a small amount of boiling water in uncovered utensils, only until tender. They lose less food value when a small amount of water is used. Spinach should be cooked immediately after washing, without adding any water since sufficient water clings to the leaves to permit cooking for the necessary 10 or 12 minutes. If green vegetables are over cooked they turn an unattractive brownish green color.

> Red vegetables such as beets are brightest if cooked with the skins on in boiling water in a covered utensil. Red cabbage will retain its color if not cut up too fine and if cooked in boiling water to which a small amount of vinegar has been added.

The skins of highly colored fruits and vegetables usually contain important food elements and when edible should be used often in food preparation for children. Frequently the most valuable part of the food is nearest the skin of fuits and vegetables. Therefore if the skins are not edible the greatest care should be used in removing as little as possible in preparation. The bright skin of apples gives an attractive bit of color to a salad and provides much more food value than if the apple had been peeled.

Artificial coloring should not be added to food except in rare instances and then it should be used very sparingly. Gaudy or unnatural colors as pink in mashed potatoes or green in butter should be avoided. Time and effort should not be spent to color or assemble fuits or vegetables to resemble faces of flowers for salads or desserts.

Baking is an excellent method of preparing food for children. Fruits and vegetables should be baked in the skins whenever possible since in that way more food value is retained and variety in texture secured.

Boiling is a method commonly used for cooking many foods. Fruits and most vegetables, except those of strong flavor, should be boiled in small amounts of water. Water drained from fuits and vegetables after boiling should be used in sauces or soups as it has nutritive value. Meats, fish, and eggs should be cooked in water just under the boiling point, rather than boiled.

Steaming is a method desirable for cooking some kinds of fruits and vegetables such as apples and carrots; less food value is lost than in boiling.

Broiling over or under direct heat, without added fat or liquid, is recommended for preparing certain foods such as meat balls, fish, and bacon.

Frying is not recommended for the preparation of food on school lunch projects since fried foods are difficult for the children to digest.

Creamed dishes, made by combining cooked vegetables, meat, fish, or eggs with white sauce, serve to give variety to school lunches and add milk to the children's diet. Scalloping, which usually consists of baking foods either raw or precooked, with milk or white sauce and bread crumbs, is also an excellent method of varying food preparation and for combining several different foods.

Part VIII. Serving School Lunches

In serving school lunches, it should be kept in mind that children do not wish to spend all of the lunch hour in eating, nor do school superintendents wish to use more time than the assigned lunch period for serving food. At the same time, if the service is regarded as an opportunity to teach good food habits and table manners, as it should be, enough time must be allowed so the child will not feel rushed while eating. Each child should spend 15 to 20 minutes at the lunch table and more time should be given if necessary. Children should not be permitted to eat in 5 or 10 minutes, in order to get out on the playground or to make room for other children to be served.

If these objectives are to be attained, careful, detailed plans for serving must be made with the school superintendent. Where a large number of children are being served with limited facilities it will be necessary to schedule several serving periods. This plan of operation can be successful only when school authorities and lunch room workers cooperate to the fullest extent.

Section 31. Preparation for Serving. Jobs should be scheduled by the unit supervisor so that everything in the kitchen and lunch room is in readiness for serving 5 to 10 minutes before children are to be served. This will mean that dishes used in preparation have been washed, that all serving tables are cleared and cleaned, and that the lunch tables have been properly cleaned and prepared. In some types of services they would be completely set while if cafeteria service is used they may be only partially set.

Lunch tables should be carefully and correctly set with a fork, teaspoon, milk glass, and napkin for each child. Each place should present a unit so there will be no confusion in placing the plate. Enough space should be allowed so children will not feel crowded in eating. If a salad is served on a separate plate, as may be done with soup, it may be placed on the table but should not stand long enough to cause it to wilt. Glasses or cups may be filled from a pitcher a short time before the children are served. If a dessert is included, it may be placed on the table. However, this may not be desirable if children insist on eating the dessert before the main course.

Extra plates, cups, forks and spoons should be in readiness to be used if needed.

All foods included on the menu should be ready for serving at least five minutes before serving time. Good food service does not permit children to wait while another pan of cornbread is baked, nor does it include vegetables that have been prepared so long before serving that the texture and flavor are impaired.

Section 32. Methods of Serving. If the lunch room is to be used as an educational opportunity for teaching good food habits and good manners it is necessary to begin with a sanitary and an efficient manner of food service. The method of serving that is best adapted to the space given and the number to be served should be used.

Regardless of the method of serving, the work should be organized and the food service scheduled so there will be the shortest possible time from preparation of food until it is eaten. Food that is permitted to stand after preparation often acquires an unpleasant texture or consistency. **Extremely** hot food should be avoided, however, since children have often acquired a dislike for certain foods because they have been burned when that food was served too hot.

The manner of serving should not be changed except when necessary since this adds confusion to the lunch room. Children should be told quickly and quietly what is expected of them when they first come to the lunch room, or if it has been necessary to change the method of serving.

Following are suggested methods of serving:

A. Service at Tables. In this method of serving school lunches the food is served on individual plates and placed on the tables just before the children arrive in the lunch room, or the served plates are placed after they are seated. This is a very satisfactory type of service for small groups and may be successfully used when a large number of children are scheduled to eat at different periods in smaller groups. The following points should be observed when this plan is used.

> The time between serving and eating should be so short that the flavor, temperature, and texture of the food are not affected.
>
> The served plate should present an attractive appearance. The different foods should not be run together or be spilled on the edge of the plate.

Servings should not be too large. Instead of attempting to place all the food a child may want on his plate at one time, second servings should be given. Second servings of food should be served from vegetable bowls rather than cooking pans.

Milk glasses should be filled and at the places when the children arrive in the lunch room.

It is desirable for children at one table to remain at the table until all have finished.

B. Cafeteria Service. This method is recommended where a large number of children must be served during one serving period.

The cafeteria service is most successful when:

Tables are set with silver, napkins, salads, desserts and milk before the children come to the lunch room.

All food is in readiness so the service moves very quickly.

Children do not wait for the whole group before eating but each table starts to eat as soon as served.

Children return in serving line for second servings.

As children finish eating (15 minutes should be the minimum time allowed at table) they carry their used dishes to a table where they are stacked for washing.

Where cafeteria type of service is used it may be desirable to serve the primary grades in their own rooms where they may sit at their work tables to eat. If this is done the food should be served from a table in the primary room, each child carrying his own plate of food to his table. Teachers often prefer this food service for small children because of the educational opportunities in self help and in eating as a group. This group should be served earlier than the older children so there will not be a conflict in time. Paper napkins or table mats ofwhite or bright colored material should be used under each plate. More time should be allowed for younger children to eat than for the older ones. Some children need as much as 30 minutes to eat all of their lunch.

C. Service in the Class Rooms. This method of serving the lunch may be necessary in rural schools or in any school where space for a lunch room is not available. In this type of service children use their desk tops for a table. It is recommended that wherever possible the food be carried to the class room in containers and served there from a serving table rather than having the children come to the kitchen to be served.

Cafeteria service may be used in the class room or individual plates may be served the children at their desks. The latter would be done only when a small group was being served.

Section 33. Conduct in the Lunch Room. The lunch room supervisors and the persons serving should be aware of the fact that some children may not sit at a table to eat at home. Also that some homes may not use napkins, forks, or cups. The necessary assistance should be given to these children without calling attention to them. A child must never feel that his food is a matter of undue interest. Children like attention and often show dislike for some food because they know they will arouse the concern of an adult by refusing it. Children may learn food likes and dislikes from adults, therefore, supervisors and workers should be careful not to express their food tastes before children in the lunch room.

Kindness of tone and manner, with an impersonal attitude toward the children, are good qualities to practice in the lunch room. All workers and supervisors need to use a quiet tone of voice and of manner of walking in the lunch room. They should learn to work and act quickly without confusing the children.

Section 34. Assistance from Teachers. In accordance with Operating Procedure G-5, Section 13, it is permissible with the approval of the sponsor to provide lunches without cost for teachers who sit at the lunch tables and supervise the children during the lunch period.

Sponsors should be encouraged to cooperate in this connection since project workers are not trained in methods of supervising children, and while they may assist teachers, they should not accept the full responsibility for this very important phase of the school lunch program.

The lunch period should be considered as invaluable in developing in children courteous conduct, good eating habits, and proper table manners. This cannot be fully realized unless teachers participate in the serving period.

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Part IX. Housekeeping on the School Lunch Project

The importance of giving constant attention to the details of housekeeping in the kitchen, storeroom, and lunch room should be impressed on every school lunch worker. Good housekeeping is not only fundamental to efficient operation but is an essential factor in maintaining proper standards of sanitation and safety.

Section 35. Orderliness of Working Areas. Order is a primary conside tion. Disorder does not necessarily imply a lack of cleanliness, but it is an indication of poor work habits and it may be a serious safety hazard. Storerooms, cupboards, open shelves, and racks should be arranged so that they present an orderly appearance and the articles they contain are easily accessible. A list of the contents pasted on cupboard doors, drawers, and shelves will often prove a time saver and simplify the problem of keeping each article in its proper place.

Newspapers or discarded wrapping paper should not be used to cover shelves or work tables. They are neither neat nor sanitary. Painted shelves are best left uncovered. Glazed paper or oilcloth, cut to fit neatly, should be used on rough unfinished wood shelves. The paper should be changed weekly or as often as necessary, Utensils used in food preparation should be washed and put away as promptly as possible. If it is impossible to wash them immediately after they are used, they should be put to soak and stacked neatly in or near the sink. Wrapping paper, empty cans, cartons and other waste should not be allowed to accumulate on work tables but should be put at once into a trash container.

Section 36. General Rules for Cleaning. The tops of work and serving tables should be washed daily with hot soapy water. Unfinished wood surfaces should be scrubbed with a brush. Floors should be kept clean at all times. The type and amount of daily care will depend on the material of the floor and the number of workers using the space. The sponsor should be consulted as to the care of different kinds of wood finishes, linoleum, and other composition floor coverings. Floors should not be swept while food is being prepared or served. Mopping should be done at the end of the day.

Furniture should be dusted daily and wiped with a damp cloth as necessary to keep it free from greasy dirt and finger marks. Varnished or waxed furniture will require occasional polishing.

Woodwork should be dusted and walls wiped down frequently. Painted woodwork requires occasional washing with soap and water; varnished or shellacked finishes should be wiped with a damp cloth.

Care should be taken at all times to keep shelves, cupboards, and drawers free from crumbs, grease, and moisture which attract rodent and insect pests. They should be washed thoroughly at least once a week.

Containers for supplies should be wiped off with a damp cloth daily to keep them free from greasy dirt and sticky finger marks. When empty, containers should be washed inside and out and dried thoroughly before refilling.

All utensils and equipment should be left clean and dry at the end of each day.

Stoves should be wiped off daily and given a thorough weekly cleaning.

Cleanliness of the refrigerator is a factor in the prevention of food spoilage.

At least once a week the food and racks should be removed from the refrigerator, the food compartments washed with warm water and baking soda and wiped dry. Racks should be washed and scalded before replacing. In ice refrigerators the ice compartment and drain pipe should also be thoroughly cleaned weekly. If food is spilled in the refrigerator it should be wiped up immediately.

In cleaning and care of all mechanical equipment, the manufacturer's instruction should be followed.

Sinks should be cleaned daily with hot, soapy water, using cleaning powders to remove stains and marks made by kettles. Iron sinks should be wiped dry at the end of the day to prevent rusting. A sink strainer should be used to keep food particles out of the drain. Grease should never be poured into the sink. The drain should be flushed with hot water and sal soda or other grease solvent used once a week to keep waste pipe and trap free from obstruction.

Fixtures of good quality nickel or chromium may be kept clean by washing with soapy water and polishing with a dry cloth. Brass and copper require the use of a metal polish.

A constant lookout should be kept for mice, roaches, and other pests. Scrupulous cleanliness will help to keep them away, but if they should appear immediate action should be taken to exterminate them before they become a serious problem.

Section 37. Dish Washing. Scrupulous cleanliness of dishes on school lunch projects is required as a measure to prevent spread of infections. State and local Departments of Public Health should be consulted concerning regulations for dish washing in food handling establishments and the methods used should conform to those requirements as a necessary minimum. In localities having no strictly defined regulations the method described below is recommended. When it is necessary to wash dishes between serving periods, the same procedure should be followed as is used for dish washing after the lunch hour.

A. Equipment. An efficient dish washing procedure calls for adequate equipment arranged for working from right to left. The following equipment is necessary:

Work table or drain board for stacking dishes.

Triple sink or three dish pans (set in sink or on table) for washing, rinsing, and sterilizing dishes. Rinsing and sterilizing pans should be deep enough to allow for complete immersion of the dishes. Tubs or vats may be desirable where there is a large number of dishes to be washed.

Wire baskets to hold the dishes are convenient for lifting them into and out of rinsing and sterilizing containers. They should be made to fit the containers.

Drain board or table with rack for rinsing and draining dishes. If a table is used it will be necessary to use a deep pan under the rack.

Clean dish cloths are necessary. Cloths which are used for wiping tables, stoves, or floors should never be used for washing dishes.

Clean dish towels, used for no other purpose, are also required. (Whenever possible, dishes should be dried by draining rather than wiped.)

Electrically operated, institutional type dish washing equipment is desirable for large units.

A plentiful supply of hot water and soap is essential to proper dish washing. Scouring powders, which should be non-gritty, and steel

wool are needed for cleaning cooking utensils. Where the water is hard, a softener should be provided.

For sterilizing dishes the use of a chlorine compound is recommended. Chlorinated lime made into a concentrated solution by the following formula is inexpensive and convenient to use:

> Dissolve 12 ounces chlorinated lime and 1½ pounds washing soda in enough cold water to make a gallon. (A glass or earthenware container should be used.) Let stand until clear; a white sediment will settle to the bottom. Pour off the clear liquid into bottles or jugs and cork tightly.

B. Preparations for Dish Washing. If work is well organized, most of the dishes used in preparation of the lunch will have been washed and put away before the serving hour, or soaked and stacked ready for washing.

As table dishes are brought from the lunch room they should be thoroughly scraped with soft paper or rubber scraper or rinsed under running water and stacked according to size and shape on the drainboard or table at the right of the sink. Forks and spoons should be put, handles up, in separate pitchers or other containers and soaked in warm water.

The dish washing sink or dish pan should be filled about two-thirds full with clean, hot water and sufficient soap added to make a good suds.

The second sink or dish pan, at the left of the first should be filled about two-thirds full with clean hot water for rinsing.

The third sink or pan is used for sterilizing the dishes. It should be filled two-thirds full with clean hot water to which the concentrated chlorine solution mentioned above is added in the proportion of one ounce (2 tablespoons) to a gallon of water.

C. Washing. Glasses should be washed first, then silverware. Special attention should be given to the times of forks. Next the table dishes should be washed, the cleanest ones first. Mixing bowls and other food preparation utensils are next in order. Cooking utensils should be washed last.

The eyes as well as the hands should be used in dish washing, inspecting each dish as it is washed to see that it is clean. Dish water should be changed frequently to keep it clean and hot.

D. Rinsing and Sterilizing. After the dishes are washed they should be rinsed in clear hot water to remove soap, then placed in the chlorine solution and allowed to stand for not less than 3 minutes. The dishes should be completely covered by the solution.

An alternative treatment consists of immersing the dishes, after washing and rinsing, in water at a temperature not lower than 170° F. for 3 to 5 minutes. However, it is less safe than the chlorine method unless a hot plate or other means of maintaining the required temperature is provided. A thermometer must be used in order to make sure that the water does not fall below 170° F.

Boiling dishes for 1 to 2 minutes after washing and rinsing is another acceptable method of sterilization, but it is less practical for the average school lunch unit. It is a longer process because of the time required to bring the water to the boiling point. It also involves carrying dishes back and forth between the sink and stove. If dishes are to be boiled, large covered containers, fitted with racks to hold the dishes, should be added to the dishwashing equipment.

E. Draining and Drying. After sterilizing the dishes should be placed in draining racks. If chlorine solution has been used it is desirable to pour hot water over the dishes but this is not absolutely necessary. Dishes sterilized by immersing in hot water or by boiling require no further rinsing. If space and time permit, the dishes should be allowed to drain until dry, otherwise they should be wiped with clean towels and put away immediately. Dish towels should not be dried and used a second time without laundering.

F. Clean-Up. To finish up the dish washing job dish pans and drainers should be washed, dried, and put away; drain boards and tables washed and dried. Dish towels and dish cloths should be washed in hot soap suds, rinsed, and hung to dry. They should be boiled once or twice a week. The sink should be cleaned and faucets wiped with a dry cloth.

G. General Suggestions. Soak in cold water dishes used for milk, egg, cheese, meat fish, and flour mixtures. Soak in hot water dishes which have contained sugar or syrup mixtures.

Wipe out greasy dishes with soft paper and soak in hot soapy water or water to which a small amount of sal soda has been added.

Clean aluminum with steel wool or scouring powder. Sal soda and other strong alkali should not be used on aluminum as they

as they darken it. Aluminum may be brightened by boiling in it an acid such as vinegar, rhubarb, or tomato.

Clean enamel, iron, and steel ware with a fine cleansing powder; if this is not sufficient boil in water to which sal soda has been added until food which has stuck on is loosened. Enamel ware should never be scraped with a sharp implement. Iron utensils should be wiped dry to prevent rusting.

When washing rotary egg beaters take care to keep the cogs out of the water.

Give silverware a special weekly cleaning in addition to the daily washing in soap suds. A commercial polish or the following method may be used: Place enough water in an aluminum pan to cover silver completely. Add 1 teaspoon of salt and 1 teaspoon of soda to each quart of water. Bring to boiling point. Allow silver to stand in the solution until bright.

To brighten steel knives, scour with a fine cleansing powder. Do not soak wooden handles as they will loosen and discolor.

Part X Training Project Personnel

Section 38. Planning the Training. Training for personnel on the school lunch project should be a part of the statewide training program for the Division of Professional and Service Projects. The overall planning of the training for the school lunch project should be done from the state office by the Supervisor of Welfare projects in cooperation with the State Supervisor of Training and the State Supervisor of the school lunch project.

The plan should include training for all levels of project personnel since there is great need for training of both supervisors and workers in relation to their jobs and the WPA program. Centralization of planning should result in:

Standardization of training materials and training methods.

Uniformity of project operation.

High standards of project operation.

Closer integration of the school lunch program with other activities of the school and community.

Centralization of basic planning for the training should not relieve the district, county and unit supervisors of definite responsibility regarding specific planning. Details for training cannot be worked out in the state office, yet if details are excluded from a plan, the plan will be ineffective. Adjustments and adaption of a broad plan made by the state office to fit local situations will be necessary in all instances.

This statewide plan for training on the school lunch project should specifically fit the WPA school lunch program. The following factors make such a plan necessary:

Federal regulations governing the operation of WPA projects.

Type of workers employed.

Type of responsibility of workers.

Limited space and facilities for operation.

Sponsor relationships.

For the above reasons the training program cannot be successfully planned around existing high school and college courses of study in home economics.

Plans should be made for pre-service training of project workers as well as for in-service training. The method of assignment of workers necessitates that the pre-service training period be a short one. The time allowed for this is usually from two to five days. In-service training should be a continuous process and in order to attain high standards of project operation it will be necessary to plan for in-service training for all project personnel

Section 39. Training Supervisors. Workers cannot be successfully trained unless the state has a well planned in-service training program for supervisory personnel. Training for school lunch supervisors should be included in the statewide plan of training for supervisors on all Professional and Service projects and may be combined with training meetings for supervisors of other welfare projects.

This training may be given on a state, district, county or city wide basis depending upon the size and organization of the program. Many states have found the following plan to be successful.

District or area supervisors of the project are assembled with District Directors of Professional and Service Projects on a statewide basis for a training institute of from three to five days with the State Supervisor of Welfare projects, the State Training Supervisor and the State Technical Supervisor of the project.

Each District Director of Professional and Service Projects, with the assistance of the district or area Project Supervisors, follows this institute with a districtwide training meeting of approximately the same length of time for county project supervisors. These might be sectional meetings of districtwide conferences in foremanship training. The Technical State Project Supervisor and the State Supervisor of Welfare projects should participate in some of these meetings in each district in order to maintain high standards of training and to assist in the evaluation of the meetings.

County Supervisors in turn follow up with group training of Unit Supervisors and workers as outlined in section 40 - A-2.

District Project Supervisors should participate in these county meetings as often as possible, and the State Supervisor of the project should attend

such meetings occasionally in order that supervision from the state office may reach Unit Supervisors.

The frequency with which the training meetings are held will vary with different states, depending upon local limitations. It is recommended that the meetings of statewide scope be held 2 - 4 times a year, that the District meetings be held 4 - 8 times a year, and the county or city meetings be held 8 - 12 times a year.

The same methods employed in training project workers may also be used for supervisory training, i.e., demonstration, group discussions, and individual conferences (see section 40, A). In addition to but not substituting for these methods, effective teaching of supervisors may be done through: Panel discussions, symposiums and lectures. The following list is suggestive of the subjects to be covered in training supervisory persons:

Methods of teaching.

Technical subject matter with special emphasis on its adaption to the WPA school lunch project.

Organization, purpose, mechanics, and activities of the WPA program.

Improved project operation.

Personnel management, or labor relations.

Sponsorship relations.

Public relations.

Section 40. Training Workers. In order that project employees on the school lunch project may be prepared to meet more successfully the specific problems encountered on their projects, they should receive additional training for the particular job of preparing and serving lunches for school children. This training should be related to the abilities of the employees and to the requirements of their duties. It should be based upon the simplified application of technical material, with the objective of instructing the employees primarily in the fundamentals of nutrition, food preparation, housekeeping, lunch room management, etc. For example, no attempt should be made to teach nutrition in terms of proteins, carbohydrates, fats, minerals and vitamins, but instead, employees should be taught what constitutes a well balanced meal by teaching them groupings of food, i.e., Group I - Proteins; Group II - Fats, etc. If the training is geared to a level beyond the workers' grasp, it will not be applicable to their particular jobs. This fact is sometimes given second consideration and the goal of the supervisor is to train the workers for better homemakers. This is an incidental objective and will come about as a result of successful training for the job.

A. Methods of Training. The most effective learning of unskilled workers occurs through a combination of watching, listening, and doing, with emphasis on the doing. The most effective methods of teaching these workers are in order of their importance:

Demonstration of work shop method.

Group discussions.

Individual conferences.

Following are suggestions for using the three above mentioned methods:

1. Demonstrations. The major portion of the training should be presented on a demonstration basis since through this method the workers practice doing something they have watched the supervisor do. In other words they are actively engaged in a work shop procedure. The demonstration method of teaching should not be interpreted to mean that workers only watch a supervisor give a demonstration. In this manual "Demonstration Method" is used to imply that after a supervisor gives a demonstration, workers must repeat the demonstration on an individual basis. This is necessary in order that they carry the demonstration over successfully in their own lunch rooms.

For example: If a supervisor gives a demonstration on preparing soft custard from dry milk each worker must actually prepare the custard if she is to acquire the necessary skill to duplicate this dessert on her project. Because of the time required for a demonstration it may not always be possible for a supervisor to complete all processes pertaining to the subject being presented. It may be necessary to confine the demonstration only to essential steps needed by the worker to carry out the demonstration successfully. For example: in a demonstration of making soft custard from dry milk, the supervisor may demonstrate to the group the following steps:

How to read the recipe.

How to use a double boiler, with suggestions for improvising one.

How to mix dry milk with water.

How to maintain correct cooking temperatures.

After workers have observed the supervisor's demonstration of these steps they should each be scheduled to make the custard, carrying out the demonstration and completing all processes to the finished product. Workers should never only partially complete a demonstration. The activity of all workers should be under the direction of the supervisor.

In planning the demonstration training the following points should be taken into consideration:

Demonstration should be planned to fit specifically the school lunch project.

This training should always be presented on a project location.

Commercial food demonstrations should not usually be included.

In preparing food it is important that workers use recipes of at least family size.

This method of teaching should be employed in all phases of training requiring activity, i. e., cooking, serving, cleaning, washing dishes, etc.

Certain training activities will permit the groupings of workers so that two to four women may be engaged in one activity - such as the organization of a store room.

At the conclusion of each demonstration a careful evaluation should be made. The entire group should participate in this evaluation.

2. Group Discussions. In order that this method of training be effective and interesting the following points should be taken into consideration:

A careful plan for the discussion must be made by the supervisor or the leader of the discussion. This plan should be detailed to the extent of listing all leading questions and must include possible solutions to problems which will grow out of the discussion.

The group should number between 8 and 15. A large group prevents individual participation.

The subject under discussion must be one which is pertinent to the work of the entire group.

Every member of the group should contribute to the discussion - unless this is done there is danger of the discussion becoming a."lecture."

An hour is the maximum length of time to expect a group of workers on the school lunch project to be interested or participate in a group discussion.

The discussion must be summarized by the leader. If the discussion is worthwhile definite conclusions can be drawn.

Interest is added to discussions through wisely chosen illustrative material such as pictures, charts, posters, and specific articles to demonstrate points in the discussion.

The discussion will be more successful if the group is sitting around a table rather than in chairs arranged in rows.

Workers should not be expected to take notes on the discussions or to copy material from a black board. Material to be used by workers should be typed or mimeographed and distributed to them.

The discussion should be kept on an objective basis and workers should not discuss personal problems.

Suggested topics for group discussions:

Work schedules
Storage of food
Making the lunch room attractive
Use of left overs
Responsibility of workers to children
Personal grooming
Safety in the lunch room

3. Individual Conferences. This method of training can be very constructive in training workers on the school lunch project. It will ordinarily be used for workers on small isolated projects where there is no unit supervisor. Since this method of training is expensive and time consuming it should seldom be used on projects which employ a group of workers. The following suggestions may prove helpful:

Individual conferences must be a planned part of the training program.

They should be scheduled ahead so that preparations can be made by both supervisors and workers.

The supervisor should determine the specific purpose of the conference and notify the worker of the purpose so that the time will be spent to the best advantage.

A hurried impromptu visit with a project worker should not be considered by the supervisor as a substitute for the well planned individual conference.

Records of conferences should be maintained so that follow-up conferences may be planned.

Results of conferences should be evaluated by administrative and technical supervisors so that techniques may be improved.

Suggested topics for individual conferences:

Management of time
Organization of reports, records, etc.,
Relationship of worker to school officials

B. Pre-service Training. The assignment of workers to the school lunch project should be made from 2 to 5 days before they are assigned to duties in the lunch room. This time should be devoted to intensive pre-service or "threshold" training. This training is particularly important where cooks and foremen are concerned since they have little conception of the responsibility involved in the job to be done. The importance of the responsibility of these workers cannot be over emphasized and the pre-service training period is considered essential in order to help them meet this responsibility. It may be necessary forego pre-service training of helpers.

The pre-service training will ordinarily be a regular part of project operation since new workers are continually being assigned. Where ever possible workers should receive this training at the project locations where they are to work. Otherwise, it should be given at the most convenient location of a school lunch project.

C. In -service Training. Workers on the school lunch project may receive in-service training on the job at their particular project location or they may be brought together in groups on a city, county or district wide basis to a centrally located project for a training period of from 4 to 8 hours.

In planning for the latter it is important to limit the size of the group. It is suggested that 15 workers be the maximum number assembled for group training. In some localities this will mean that within the city, county, or district, several group meetings will be needed in order to reach all workers. Since the training of workers should be done on project time it will be necessary to schedule workers so that they may accumulate the hours needed for the group training. This type of in-service training should be given once a month wherever it is possible to assemble workers.

1. Training on the Job. When the training of school lunch workers is done on the job it is done under natural and informal conditions and therefore, can be very effective. In some localities the major portion of training on the school lunch project must necessarily be done in this manner through field visits made by the district, area or county Technical Supervisors. These visits must be well planned by the Supervisor and be of sufficient length to insure giving the workers definite training in the jobs to be done. It is important that Supervisors be appropriately dressed to give this training. If it is not practical to wear uniforms on field visits, supervisors should carry a uniform with them to put on after arriving at a unit. Unless a supervisor is properly dressed for the job, workers may become careless in their manner of dress.

Following are suggestions for the type of training which should be given on the job:

Organization and Management of Work. It may be necessary for the supervisor to sit down with a worker and make out a plan of work either for the entire day or for one specific job. If it is a specific job the Supervisor should remain at the unit until the job is completed in order that she may assist the worker in evaluating the work plan.

Food Preparation. All workers need training in food preparation. A Supervisor can teach improved methods of cooking or new principles by using for demonstration the preparation of some of the food to be served in the school lunch.

Housekeeping. Workers need training in organizing and cleaning store rooms, cupboards, refrigerators, etc., Supervisors should demonstrate to workers how improvements can be made through better housekeeping.

2. Group Training. When workers are assembled for a day of group training it is important that the day be carefully planned. The following suggestions are given for making the plan:

The day should include both group discussions and activity training, and all workers should be scheduled to participate in both.

It may be advisable to divide the group after a general presentation so that a portion of them are engaged in a group discussion, while others are engaged in a demonstration. The groups should exchange at a specified time so that at the end of the day each worker will have participated in the various training groups.

Where a district and county Supervisor are giving the training, one should lead the discussions while the other supervises the demonstration of the workers. If only one Supervisor is conducting the training it will be necessary that she supervise the several groups. If a careful plan has been made and presented to the group a Supervisor can successfully direct several training groups. Care should be taken not to over supervise since this tends to prevent workers from developing self confidence.

This training should be given by Technical Supervisors of the school lunch project. Dependent upon organization this may be the city, county, area or district Supervisor. Full use should be made of available technical persons in the community to assist with the training. If such persons are used they should have an interpretation of the project and an understanding of the problems.

D. Content of Training Program. Following are minimum essentials for training project workers:

Pre-service Training

Interpretation of the project.
Personal hygiene and sanitation.
Preparation of sample school lunch menus.

In the short period allowed for this introductory training it will be impossible to cover the above topics except in their most elementary aspects.

However, the time should be scheduled so that workers receive some training in each subject. The same topics should be developed in much more detail in the continuous or in-service training.

In-service Training

Organization, purpose, mechanic and activities of the project.

Personal hygiene and sanitation.

Safety education.

Housekeeping on school lunch projects.

Management of time and energy.

Care and use of equipment.

Proper storage of foods on school lunch projects.

Requirements for well balanced, palatable school lunches.

Simple basic food preparation for children.

Methods of table service suitable for school lunch projects.

Organization of the serving period.

Relationship of worker with children, teachers and all employees of the school.

Part XI. Technical Inspection

Section 41. Purpose of Inspection. The purpose of technical inspection of units of the school lunch project should be to evaluate the following:

Facilities for preparing and serving lunches.

Methods employed in maintaining sanitation standards.

Organization and management of work.

Work standards of all persons employed on the unit.

Type of menus served and the methods of food preparation used.

Methods of serving lunches.

Conduct in the lunch room.

Relationship of workers with children and school officials.

Section 42. Methods of Inspection. If worthwhile inspections are to be made sufficient time must be spent on a unit by the technical supervisor to obtain accurate information necessary for making the above evaluations. One well planned visit which is properly timed is worth many short, impromptu visits.

Technical inspections may be made by the state, district, area, county or city Technical Supervisors depending upon the local organization. They may be either scheduled or unannounced. Both types of visits are valuable.

A. Scheduled Visits. Project inspections which are scheduled, give the unit supervisor, foreman or cook an opportunity to make preparations for a working conference. These persons should know that within a designated period of time they will have an opportunity to discuss with the Technical Supervisor current problems of operation such as: records and reports; work schedules, and menu plans or adjustments.

The Technical Supervisor making the inspections should refer to records of previous inspections so that she will be ready to give needed help on specific problems. She should direct and participate in the inspection conference but it should not be a "one sided" conference.

Improvements made since the last inspection visit should be noted by the visiting supervisor and an evaluation of them made. Criticism should not be given unless definite suggestions for improvements are offered.

B. Unannounced Visits. It is necessary and valuable to make unannounced technical inspections on all school lunch units. In this case the unit personnel will not be able to make advance preparations. However, the supervisor making the inspection should prepare the same careful plan as for a scheduled visit. These visits should not always take place at the same hour of the day. All phases of work of the unit should be inspected through unannounced visits. The Technical Supervisor should, as in scheduled inspections, evaluate improvements noted since her last visit.

Section 43. Records of Inspections. Written records of inspection visits to all units should be maintained in the District Office.

Every inspection visit should be evaluated with the unit supervisor, foreman or cook and specific recommendations for improvements discussed. In addition to this, the visit should be followed by a written report to the unit incorporating the recommendations.

As improvements are made they should be recorded on inspection reports so that the State Office may obtain at any time, accurate information on all phases of the technical operation of units of the school lunch project.

(October 9, 1940)

SCHOOL LUNCH UNIFORM

Construction Specifications

1 - Seams
- (a) 3/8 inch plain

2 - Back
- (a) Lay in 3 inch inverted pleat and edge stitch 1-3/8 inch from bottom of waist on each side of pleat. (see notches for pleat)
- (b) Join yoke to waist with plain seam. Edge stitch.
- (c) Stitch 4 inch darts

3 - Front
- (a) Stitch darts 5 inches at shoulders and 4 inches at waist line
- (b) Apply facing with plain seam
- (c) Join shoulder seams

4 - Collar
- (a) Make collar and attach to blouse (see notches)

5 - Sleeves
- (a) Set in sleeves. Join notches on front of sleeves. Back notch to match edge of under sleeve
- (b) Edge stitch yoke and top of sleeves
- (c) Lap stitch under-arm seam
- (d) Attach cuff with plain seam
- (e) Top stitch 1/4 inch from edge of cuff

6 - Front and Collar
- (a) Stitch 1/4 inch from edge of front and around collar

7 - Back Skirt
- (a) Stitch 5 inch darts in back of skirt
- (b) Set in back panel for inverted pleats
- (c) Edge stitch pleat on both sides down 12 inches from waistline

8 - Front Skirt
- (a) Make placket and stitch front pleat finishing 1-1/4 inch wide
- (b) Set on double pockets with stitching 1/4 inch from edge (See sample)
- (c) Make keepers and attach to side front

9 - Side Seams
- (a) Stitch sides

10 - Hem -- 2 inches finished

11 - Waist
- (a) Attach skirt to waist with plain seam
- (b) Edge stitch skirt over blouse

12 - Belt
- (a) Make belt. Turn and stitch 1/4 inch from edge on both sides

13 - Findings
- (a) 5 Buttons, ligne 24

UNIFORM

Group Fabrication

Operator I

A - Stitch inverted pleat in center back of blouse 1 3/8 inch from top. 2 3/8 inches from bottom

B - Join to back yoke

C --Stitch darts in blouse fronts and back

D - Sew facings on fronts and join shoulders

E - Make double pockets and belts

Operator II

A - Make collar-attach to blouse

B - Set in sleeves

C - Edge stitch around yoke and top sleeves

D - Sew up sleeves and under-arm seams

E - Attach cuffs; stitch to sleeves 1/4 inch from top edge of cuff

Operator III

A - Stitch darts in back of skirt; set in back panel for inverted pleat

B - Stitch pleat 12 inches from waistline

C - Join front of skirt and set on pockets

Operator IV

A - Make keepers and attach

B - Join side seams of skirt

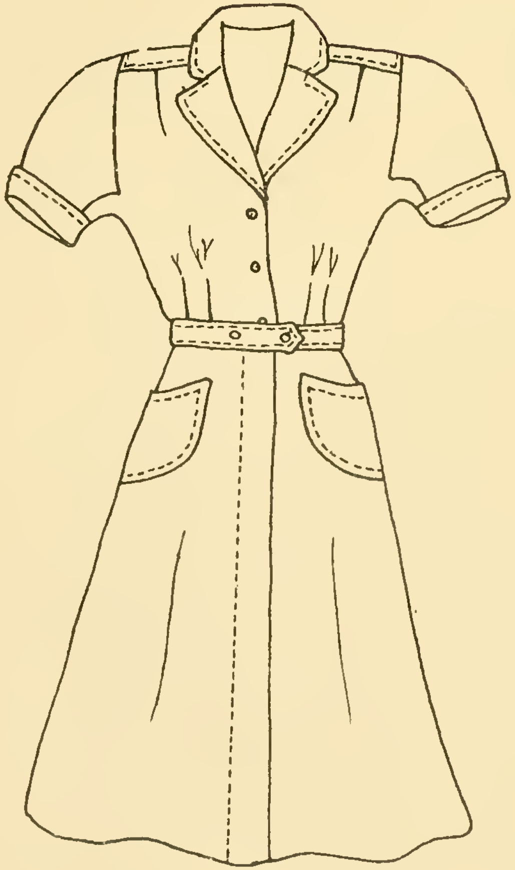
C - Put in hem

D - Attach skirt to blouse and top stitch

E- Stitch around front edge of blouse and edge of collar 1/4 inch.

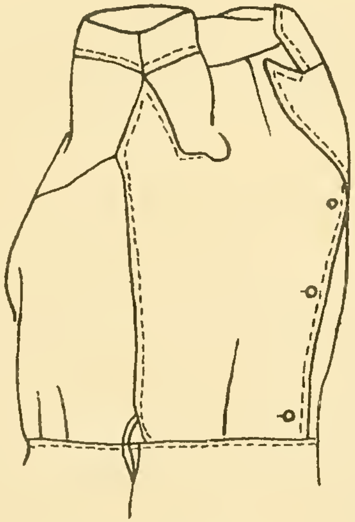
F - Sew on tag.

SCHOOL LUNCH UNIFORM

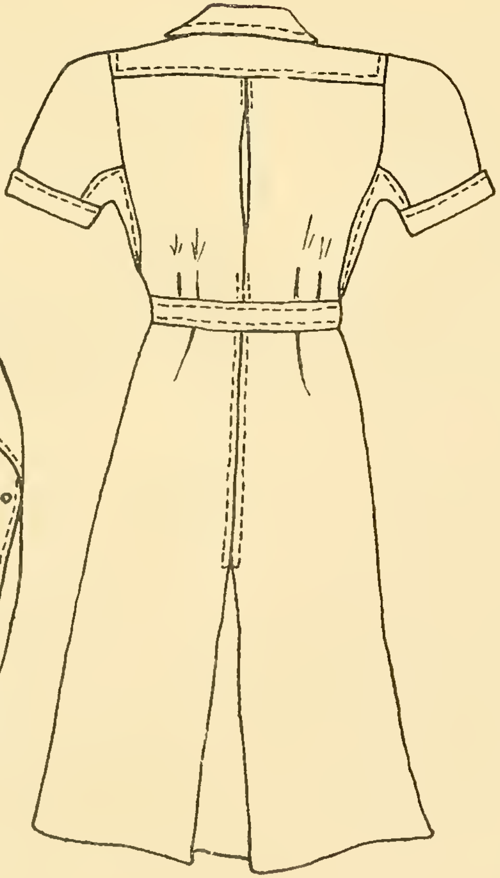


3/8 inch seams.

2 inch hem



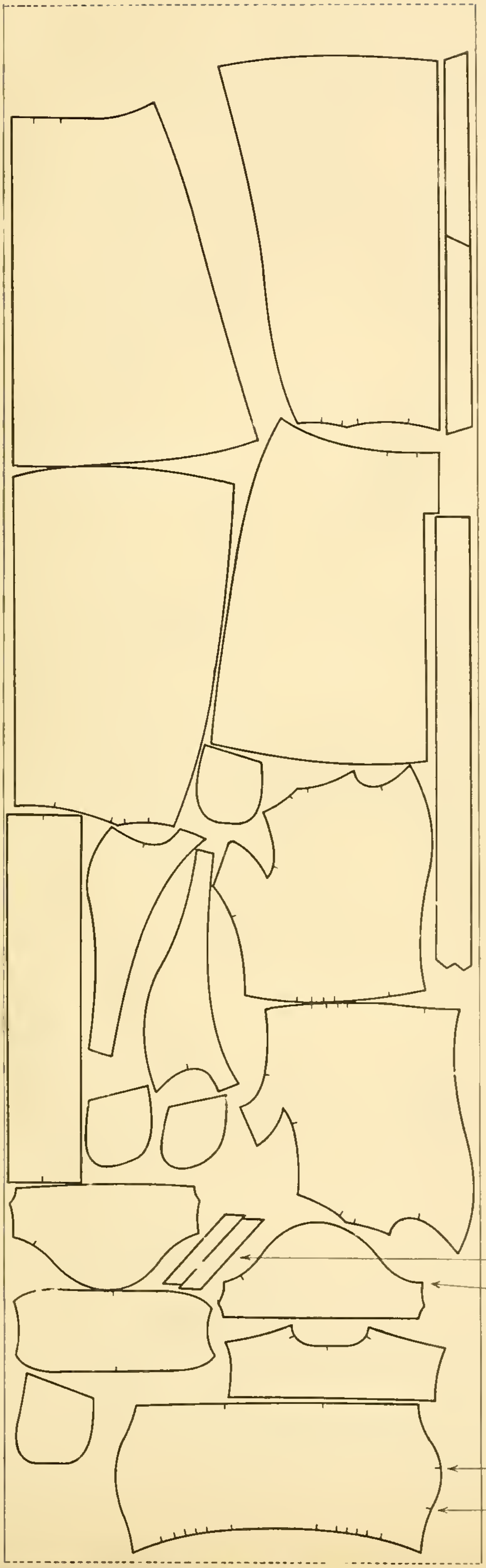
View of Under-arm
Sleeve



One set of patterns for this uniform (sizes 34, 36, 38, 40, 42, 44, 46, 48, 50, 52) may be obtained by each region from office of Region VIII, Denver, Colorado.

SCHOOL LUNCH UNIFORM

Size 36
3½ yards of material
35 inch material



Bias for belt keepers

Point goes to sleeve notch in back of waist

Sleeve notch

Side seam notch

REFERENCE MATERIAL

Tested Recipes
Minnesota Work Projects Administration School Lunch Testing Kitchen.

Well-nourished Children
U. S. Dept. of Labor, Children's Bureau Folder 14.
1939.
(In cooperation with the U. S. Bureau of Home Economics)

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